

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 660.—Vol. XVIII.

LONDON, SATURDAY, APRIL 15, 1848.

[PRICE 6D.]

SILVER VALLEY, CALSTOCK.—SIMS'S COMBINED CYLINDER-ENGINE, WATER-WHEELS, MINE MATERIALS, &c.

Respectfully announces he is honoured with instructions from the directors of the SILVER VALLEY MINING COMPANY, TO SELL, BY PUBLIC AUCTION, without the least reserve, at the MINE, on Tuesday and Wednesday, the 24 and 25 of May, the valuable

STEAM-ENGINE, WATER-WHEELS, PLANT, AND MATERIALS.

190 Fathoms of 8, 9, 10, 12, and 13-inch pumps, with working barrels
Winders
Matching-pieces
Clockwork-pieces
Seatings and glands
Plunger Poles Stocked
Fathoms of 8 and 10-inch main-rod
2 Excellent cast-iron
2 Shafts, with pulleys, complete
3 Horse-wheels, with poppet-heads and pulleys
2 Balance-bells
1 Angle, or V-bolt
100 Fathoms of horizontal-rod, strapping-pieces, pulleys, brasses, and stands
Powerful wrench and beam

COUNT-HOUSE FURNITURE, IMPLEMENTS AND FITTINGS OF ASSAY-OFFICE.
SMITHY—3 anvils, horse, vice, ring and hobbie moulds, plates and taps, screw stock, 3 anvil-bellows, 45 and 36 inches, cranes, new iron, bolts and burrs, scrap-iron, excellent tools, &c.

CARPENTERS' SHOP—Quantity of barrels, 2 benches, cross-cut saw, saw-pit, plank, &c.
TRIPOD DIAL, and QUADRANT, set of mathematical instruments, &c.
TWO WATER-WHEELS, of 19 and 22-foot diameter, and 23-inch breast, with the 19 stamp-heads, axles, tappets, lifters, &c., attached; and the

COMBINED CYLINDER-ENGINE

(equal to 50-inch cylinder), on Sims's Patent, erected by Mr. William West, about two years since, and now in perfect working order, together with the boiler, about 10 tons, and the well and condensing work.

The mine is situated about two miles from Callington, seven from Tavistock, and three from the quays on the Tamar, where every facility is obtainable for shipping heavy weights. The small road joins the mine.
G. G. respectfully calls the attention of mine agents to this very valuable machinery, which has been in use only about two years, and is, for all mine purposes, as good as new. Catalogues will be ready for delivery on Thursday, the 27th inst. (on and after which day the whole will be on view), and may be obtained at the West Briton Office, Truro; Bedford Hotel, and Queen's Head, Tavistock; Webb's Hotel, and the Mountain Inn, Liskeard; at the company's offices, 44, Finsbury-square, London; of Mr. J. Peter, the purser, Callington; or of the auctioneer, at his offices, 20, George-street, Plymouth. Refreshments at Liskeard. The sale will commence each day at noon precisely.
Dated, 20, George-street, Plymouth, April 12, 1848.

SARK MINING COMPANY.—SALE OF MATERIALS.

comprising a PUMPING-ENGINE, 45-inch cylinder, 9 ft. stroke, with two boilers, of about 30 tons, with steam-chest, 15 feet long, 3-feet 6-inch diameter.
A WHIM-ENGINE, 18-inch cylinder, 4 feet stroke (double), with two boilers, of about 1 ton.

A CRUSHING-MACHINE, complete, one pair of rollers, worked by a water-wheel, 25-feet diameter, 2-feet breast, with a stamp's axle, to work six heads, attached.
25 fathoms 12-inch pump; 57 ditto 9-inch ditto; 34 ditto 8-inch ditto; 18 ditto 6-inch ditto; 24 ditto 5-inch ditto; 17 ditto 4-inch ditto.
1 12-inch plunger, complete, &c.; 1 10-inch ditto ditto; 1 9-inch ditto ditto; 2 8-inch ditto ditto; 1 6-inch ditto ditto.

1 8-inch working barrel, complete; 1 6-inch ditto ditto; 2 4-inch ditto ditto.
115 fathoms of 8, 9, 10, and 11-inch shaft-rod (wood).
20 pairs best iron strapping-plates, about 6 tons.

40 fathoms of 12-inch bucket-rod (iron).
40 fathoms 1-inch and 1 1/2-inch horizontal-rod (iron).
40 ditto 1-inch and 1 1/2-inch vertical-rod (iron).
100 fathoms 1/2-inch chain.

1 self-shifting, 96 feet, with shafts and brasses, complete.
1 capstan (4-arms), cast-iron axle and sockets, with 150 fathoms of 10-inch rope.

A large quantity of useful iron and materials, fittings of office, complete set of smith's tools, turning lathe, and many other articles.

For further particulars apply to A. J. Le Mesurier, Esq., Guernsey; or to Mr. Matthew Loan, Liskeard, Cornwall.

TO RAILWAY CONTRACTORS AND OTHERS.

TO BE DISPOSED OF, BY PRIVATE SALE, A LOCOMOTIVE ENGINE, with six feet wheel connected, cylinders outside, 14 inches diameter, and 5 feet stroke. A 20, a TENDER, with six wheels, and capable of holding 1800 gallons of water. Both the engine and tender are in good condition, having been in use not more than six months, and are well worth the attention of those to whom power is more an object than speed. Further particulars may be learned by applying to Mr. John Lancaster, Kirkless Hall Colliery, near Wigan, where the engine, &c., may be seen.

VALUABLE SEA-SALE COLLIERIES TO BE LET.

TO BE LET, and entered upon on the 1st of July next, the valuable current-working COLLIERIES OF EVENWOOD and NORWOOD, in the county of Durham. These collieries are situated upon the line of the Stockton and Darlington Railway, by which the coals are conveyed to the shipping ports of Stockton and Middlesbrough; and also, by means of this, and the York and Newcastle, and Leeds and Thirsk Railways, the coals have access to the important land-trade of Northallerton, Thirsk, Ripon, York, the lead-mining districts, and other towns in Yorkshire, and for shipment on the Ouse; and, by means of the proposed Northern Counties Union Railway, with the important land-trade of the western parts of Yorkshire and Westmoreland.

The royalties are very extensive. Two seams of coal are in working—one upwards of 6 feet, and the other of 3 feet. The pits are at a moderate depth from the surface, and the coal is worked at an exceedingly cheap rate, and is much prized as a household coal, both for export and sale.

The entering tenant has the option of taking what stock he may require, at a valuation; and the amount of capital required to enter upon the collieries will be of very small amount.

For particulars apply to Thomas Wheldon, Esq., Barnard Castle; or to Nicholas Wood, Esq., Newcastle-upon-Tyne.—Newcastle, March 3, 1848.

EXTENSIVE IRON-WORKS.—FOR SALE, BY PRIVATE

BAUGHAN, the BLAIR IRON-WORKS, belonging to the Ayrshire Iron Company, situated in the parish of Dalry, and county of Ayr.

These works, which have been recently erected at an immense cost, consist of two blowing-engines, five blast-furnaces, workmen's houses, steam-engines for working the minerals, together with utensils at the pits, furnaces, &c., all in working order, and capable of producing upwards of 35,000 tons of pig-iron per annum.

One of the blowing engines, high-pressure, estimated at 90-horse power, was erected in 1841; the other, a condensing engine, was erected in 1847, and is estimated at 200-horse power, the latter being capable of blowing five furnaces, and both fitted up in the most substantial manner, and at present in the best working condition.

The furnaces have been erected with the greatest care, and are fitted with air-heating apparatus of the most approved construction. The make of each furnace has generally averaged upwards of 150 tons of iron per week, and some of them have produced 180.

There are, besides the manager's house and store buildings, 187 workmen's houses, in a habitable state, attached to the furnaces and pits, and there are 20 partly built, which could be finished at a small additional outlay. There are also a new foundry, Wright shop, fire-brick work, smithy, &c.

The MINERAL FIELDS, consist of COAL, IRONSTONE, LIMESTONE, and FIRE-CLAY, held in lease, by the company, at moderate fixed rents and royalties, all situated within easy distances of the furnaces, and for the most part have the advantage of railway communication.

The COAL-FIELDS consist of several hundred acres, of which only a small portion has been wrought. Several pits, fitted with good engines and machinery, are sunk to the coal, and partly in operation.

The IRONSTONE consists of the well-known black-band, yielding about 3000 tons of calcined stone per acre; and it has been estimated that there are 300 acres or thereby still to work—besides which, there is a large extent of clay-band ironstone, of the best quality, but capable of yielding a large output. There are 15 pits, with excellent steam-engines—some of them in present operation, and others ready to resume working.

The LIMESTONE QUARRY is worked by open cast, and is connected with the works by railway.

The FIRECLAY is abundant, of excellent quality, and cheaply produced. The Glasgow, Paisley, Kilmarnock, and Ayr Railway (extending to Carlisle), passes close to, and has connection with, the furnaces—by means of which, and others in connection with it, the produce can be conveyed to the city and port of Glasgow (22 miles off), and to the seaports on the Ayrshire coast, each within a few miles of the works.

There is a large stock of calcined ironstone, coal, and limestone on the ground, so that the works may be put into immediate operation, and, under judicious management, the manufacture of pig-iron may be carried on to the greatest advantage. The concern will be found to be well worth the attention of persons having the requisite capital, and affords an opportunity of entering into the business seldom to be met with.

MALLEABLE IRON-WORKS.—Considerable progress has been made in the erection of extensive malleable works, which, when completed, will be capable of turning out 300 tons of bar-iron weekly. The most of the necessary machinery has been prepared by the contractors; and a portion of the work could be brought into operation in a few months to produce the half of the above estimate. This work is nearly adjoining the F. & G. Iron-Works, and connected by railway, and will be sold either together therewith or separately.

Plans of the property and mineral workings lie for inspection at the Ayrshire Iron Co.'s office, 112, St. Vincent-street, Glasgow, where, on application to Mr. Brown, every necessary information will be afforded, and orders given for inspection of the works.

WINDMILL.—TO BE SOLD, a HEAD of an excellent

WINDMILL, consisting of a copper-covered top, fan and turning gear, with kerb, 14 feet diameter, and frame work, complete.

BREAK-WHEEL, 8-feet 10-inch diameter.

WIND-SHAFT, adapted for patent adjusting sails; and waller 5-feet 3-inch diameter; and upright shaft (hollow), 10 inches diameter, and 56 feet in length; step brass and iron box—the wheels all of cast-iron, fitted and trimmed; with brasses and plumber-boxes—all in excellent order, for immediate use. The above was erected in 1838.

Also, 160 SHUTTERS, with brass thimbles and iron cranks, fitted new in 1845, for 10 feet width of sail.

For particulars, apply to Mr. John Jeffries, Grove Iron Foundry, Southwark.

WANTED IMMEDIATELY, for the COOMBE VALLEY

QUARRY and WHEEL TRESCOTT MINE, SPARE MINE and other MATERIALS, consisting of a 14 or 16-feet water-wheel, 30-inch cylinder pumping-engine, a crab wheel, gear chains, 16-inch lift of pumps, smith's hammers and tools, mine picks, jumpers, barrows, a horse and cart, barrows, tin scoops, old scrap iron, bolts, straps, &c., ladders, launders, stamps, a whim and rope, railway iron and saddles, or any old lots of old machinery and implements, useful in works of the above kind; also, TWO STRONG ANCHORS, of not less than half a ton weight each, with or without chain cables.

Apply by letter, stating full particulars, relative to price and distance from Bodmin to Mr. John Webb, engineer, Lanivet, near Bodmin; or Mr. C. S. Richardson, 5, Whitefriars-street, London.

UNDER BRITISH AND FOREIGN LETTERS PATENT.

TO CAPITALISTS.—FIRST CLASS INVESTMENT.—SHARES TO BE DISPOSED OF, in valuable patents, recently sealed, and in works connected therewith. The produce of soft stone, chalk, and sand quarries, is increased, and rendered impervious to wet, frost, vermin, &c.; also, plaster of Paris, cement, &c., for all building and other purposes.

Further particulars, and various specimens to be seen, at Messrs. Hutchison, Wilford and Co., the patentees, East Temple Chambers, 3, Whitefriars-street, Fleet-st., London.

IMPORTANT TO CAPITALISTS.—TO BE SOLD, an

excellent SLATE and SLAB QUARRY—VARIEGATED MARBLE and HONE QUARRY—COPPER and LEAD MINES—all situated on the same property, within a short distance of the shipping harbour of Formidale, Carnarvonshire.

A GENERAL STATEMENT.

The above works are situated on a farm called Croesor-uchaf, in the parish of Llanfrothen, in the county of Merioneth, about seven miles distant from the shipping harbour of Formidale, and about two and a half from the railway of the Festiniog Slate Quarries to the north. They are near the celebrated quarries of Llanfrothen, which are well known throughout Europe, and it hath been ascertained, by competent judges, that this slate vein is a continuation of the very productive vein worked by the Welsh Slate Company at that place, of which Lord Palmerton and other noblemen are partners, which send about 500 tons per week of fine slate to the market. The vein is about 70 yards wide, and very advantageous for working, being situated on the brow of a hill, and the rubbish thrown down, where there is a depositary of 200 or 300 yards deep for it, without causing any trespass. The quality is good, splits well, and is of a beautiful blue colour. Slates of the largest size are made from it, and slabs also. Thousands of fine slates, worked to sizes, and beautiful slabs are now ready on the bank.

The proprietor has ascertained most positively that no other slate quarries in Wales can produce such beautiful specimens from so near the surface, and where so little money has been expended.

The MARBLE and HONE adjoins the slate quarry, and some splendid specimens of variegated marble and hone have been already made from it.

The COPPER and LEAD MINES are about a quarter of a mile from the slate quarry, and the metals are of superior quality, and likely to become very productive. There is the best facility for carrying on operations at all the works, which may be done with little expense, as few or no machinery will be required. A sawing and planing engine may be worked by water, just below the quarry.

The PROPERTY on which the above are situated will BE SOLD WITH THE WORKS, if required, which consists of 800 acres of land (more or less); about 200 acres of which is good arable, meadow, and pasture land; and the other 600 adapted for sheep and young cattle; 1200 sheep are kept on it in summer.

Satisfactory reasons will be given why it is sold.

For further particulars, and to treat for the same, apply (postage paid) to Mr. Richard Jones, printer and auctioneer, Dolgelly, North Wales, where specimens of the slates, marble, hone, copper, and lead, may be seen.

FOURDRINER'S PATENT SAFETY APPARATUS, for

PREVENTING ACCIDENTS IN MINES AND OTHER PLACES, WHEN THE ROPE OR CHAIN BREAKS.

By the ADOPTION of this INVENTION the LIVES of the WORKING MINERS may be PRESERVED, and the PROPERTY of the MINE OWNERS PROTECTED from the serious consequences of either of the following accidents—viz.:

1. From the men, or the load, being precipitated to the bottom of the shaft when the rope or chain breaks: in this case the apparatus is self-acting.

2. From either the man, or load, being drawn over the pulley: in this case, also, the apparatus is self-acting.

3. From the fearful consequences to men or load of a "whirl," or run: in this case the result is equally certain.

A COAL PIT, with the SAFETY APPARATUS ATTACHED to the CAGE, is daily at WORK near BURSEUM, in the STAFFORDSHIRE POTTERIES.

To inspect the apparatus, or to obtain any further information, application may be made to Mr. Edward N. Fourdriner (the patentee), Cheddleton, near Leek, Staffordshire; or to Mr. Joseph Fourdriner, 68, Arlington-street, Camden Town, London—who are prepared to GRANT LICENSES for the USE of the PATENT.

PATENT GALVANISED IRON AND WIRE ROPE WORKS,

MILLWALL, POPLAR.

ANDREW SMITH begs to inform the Mining, Railway, and Shipping interests, that he has obtained a PATENT for an IMPROVED METHOD of GALVANISING IRON, producing a much superior article at a considerably saving in cost—the improved process for galvanising wire rope, adding only £10 per ton instead of £20, under the ordinary process. The rope is extensively used in damp situations, for mining and railway purposes, and for ships' standing rigging.

PATENT FLEXIBLE INDIA-RUBBER PIPES AND

TUBING, for Railway Companies, Brewers, Distillers, Fire-Engines, Gas Companies, Gardening and Agricultural purposes, &c.

THE PATENT VULCANISED INDIA-RUBBER HOSE-PIPES

are made to stand hot liquor and acids, without injury; do not become hard or stiff in any temperature (but are always perfectly flexible); and as they require no application of oil or dressing, are particularly well adapted for Fire Engines, Pumps, Gas, Beer-Engines, Gardens, and all purposes where a perfectly Flexible Pipe is required.

Made all sizes, from 1-inch bore upwards, and of any length to order.
Vulcanised India Rubber Garden Hose, fitted with brass-taps, Copper branch and Rose's complete, ready to be attached to pumps, water-butts, or cisterns.

Sole manufacturer, JAMES LYNE HANCOCK,

Goswell Works, Goswell-road, London.
N.B.—Vulcanised India-Rubber Washers, of all sizes, for joints of hot-water and steam-pipes, and Vulcanised Sheet Rubber, any thickness, for all kinds of joints, and other purposes.

LAMBERT'S PATENT FLEXIBLE DIAPHRAGM

WATER VALVES, or TAPS.—A certain PREVENTATIVE of LEAKAGE, superseding the use of the metal plug-tap, which is so continually out of order. They are more durable, less expensive, and being nearly frictionless, are opened and closed with perfect ease. They have been tested under various pressures, and have given the greatest satisfaction.—MANUFACTURED ONLY by the Patentees,

THOMAS LAMBERT & SON, Brass and Cook Founders,

30, New-cut, Blackfriars-road.

PATENT IMPROVEMENTS IN CHRONOMETERS,

WATCHES, AND CLOCKS.—E. J. DENT, 22, Strand, and 33, Cockspur-street, watch and clock maker, BY APPOINTMENT to the Queen and his Royal Highness Prince Albert, begs to acquaint the public, that the manufacture of his chronometers, watches, and clocks, is secured by three separate patents, respectively granted in 1836, 1840, 1842. Silver lever watches, jewelled in four holes, 6 gs. each; in gold cases, from £3 to £10 extra. Gold horizontal wall clocks, with gold dials, from 8 gs. to 12 gs. each.

DENT'S PATENT DIPLIDIOSCOPE, or meridian instrument, is now ready for delivery. Pamphlets containing a description and directions for its use, 1s. each, but to customers gratis.

OFFICE FOR PATENTS, 7, STAPLE INN, HOLBORN.

J. MURDOCH (successor and late assistant to Mr. Robert)

informs INVENTORS and PATENTEES, that, at his OFFICE, they can obtain REFERENCE TO A CLASSIFIED LIST OF PATENTS.

(THE ONLY ONE EXTANT), which shows at one view all the Patents ever granted for any particular object, whereby they may save much trouble and expense, and procure information not otherwise obtainable. BRITISH and FOREIGN PATENTS OBTAINED, and USEFUL and ORNAMENTAL DESIGNS REGISTERED.

SPECIFICATIONS carefully prepared, and REPORTS of ENROLLED SPECIFICATIONS furnished on moderate terms.
FINISHED and WORKING DRAWINGS executed with accuracy and dispatch.

STEAM TO INDIA AND CHINA, VIA EGYPT.—Regular

MONTHLY MAIL (steam conveyance) for PASSENGERS and LIGHT GOODS TO CEYLON, MADRAS, CALCUTTA, PENANG, SINGAPORE, and HONG-KONG.
THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY
BOOK PASSENGERS and RECEIVE GOODS and PARCELS for the ABOVE PORTS by the steamers—starting from Southampton on the 20th; and from Suez on or about the 10th of every month.

For rates of passage-money, plans of the steamers, and to secure passages, apply at the company's offices, No. 132, Leadenhall-street, London.

TO IRONMASTERS AND CAPITALISTS.—WANTED

an ENGAGEMENT, by a person of middle age (son of a deputy against the iron tax), with 30 years' experience, as MANAGER of MINES and IRON-WORKS, of which he has erected several in the Midland Counties, and in Wales.—Address "A. B.," Post-office, St. Clears, Carmarthenshire.

FOR SALE, BY PRIVATE CONTRACT, a NEARLY NEW

ENGINE, on the combined principle of Messrs. Harvey and Co., from the drawings of Mr. W. West, with 60 and 32-inch cylinders—equal to 141-horse power. Apply to Mr. P. N. Johnson, 79, Hatton-garden, London.

TO BE SOLD, a 40-horse power HIGH-PRESSURE STEAM-

ENGINE, with ONE BOILER, equal to 20-horse. The engine is quite new, and not now being wanted, will be sold cheap.—Apply to Mr. Charles Sanderson, Sheffield.

STEAM-ENGINES.—From 8 to 20-horse power ENGINES

ALWAYS IN STOCK.
Apply to Mr. CAPPER, Engine-Maker and Founder, BIRMINGHAM.
Price—£12 to £16; with boiler, £22 per horse.

BLAENGWAWR STEAM COAL, CARDIFF.—placed on

the List of Coals supplied, by Contract, to the Government.—ORDERS for the BLAENGWAWR STEAM COAL RECEIVED by Mr. W. F. STANTON, No. 9, LOVE-LANE, EASTCHEAP; or by Mr. George Sully, agent, 1, Butte-street, Cardiff, Glamorganshire, South Wales.

MINING OFFICES.—ESTABLISHED FIVE YEARS.—

THOMAS P. THOMAS begs to inform his friends and the public, that he has REMOVED from No. 18, Threadneedle-street, to No. 3, GEORGE-YARD, LOMBARD-STREET, LONDON (late Messrs. Phillips and Tiplady's).
N.B.—Dealer in English and Foreign Funds, Mining, Railway, Gas, and other shares.

WILLIAM W. TAYLOR & CO., MINERAL SURVEYORS,

MINING SHAREBROKERS, &c.
No. 2, ROYAL EXCHANGE-BUILDINGS, LONDON.

MR. R. TREDINNICK, THREE KING'S COURT,

LOMBARD-STREET, LONDON.
Continues to DEAL in every description of MINING, RAILWAY, BANKING, INSURANCE, CANAL, and OTHER SHARES.—Statistical information afforded gratuitously, upon personal application.—MONEY ADVANCED upon the above securities.

MR. JAMES STRIDE, PARLIAMENTARY AGENT,

begs to announce, that he has COMMENCED BUSINESS as MINING, SHARE, ESTATE, and GENERAL AGENT. He has ON SALE, SHARES in the best DIVIDEND-PAYING and OTHER MINES. The earliest and most authentic information, and the full benefit of the market value, afforded to buyers and sellers of mining and other property.—MINES INSPECTED AND REPORTED ON.—London, 35, Charing-cross.

JAMES LANE, MINING SHARE DEALER

75, OLD BROAD-STREET, LONDON.

WILSON & FRASER, 2, WELLINGTON-BUILDINGS,

LIVERPOOL, and 13, EXCHANGE-PLACE, GLASGOW, have always ON SALE PIG-IRON, BAR-IRON, RAILWAY CHAIRS, and RAILWAY BARS.

BRITISH MINING OFFICES.—NOTICE.—THE BUSINESS

of these OFFICES will henceforth BE CONDUCTED at No. 25, FLEET-STREET, LONDON, and No. 4, STAMP-OFFICE BUILDINGS, MANCHESTER, to either of which offices communications are requested to be addressed. The correspondence and reports, with the accounts, of the respective companies may be inspected at all times, on application.
British Mining Offices, Feb. 17, 1848.

WILLIAM SHEARMAN
JAMES TRUBSCOTT.

MONEY.—MESSRS. KILLICK & CO. (late WINSTANLEY,

KILLICK, & Co.), SHAREBROKERS, inform their friends and the public, they make IMMEDIATE ADVANCES, to any amount, on the deposit of English and Foreign Railway Shares, Serp, and Debentures, upon exceedingly advantageous terms; they also BUY and SELL every description of STOCK and MINING SHARES, at much less commission than usually charged.

6, Bank Chambers, opposite the Bank of England.

DARTMOOR CONSOLS TIN MINING COMPANY.—

A SECOND SPECIAL GENERAL MEETING will be HELD at the George and Vulture Tavern, George-yard, Lombard-street, in the city of London, on Monday, the 17th day of April inst., at Twelve o'clock at noon, for the purpose of taking into consideration, and confirming, the resolution of a meeting, held the 30th day of April inst., for dissolving the above company. (By order) WILLIAM BEARD, Purser.

April 6, 1848.

KINZIGTHAL MINING ASSOCIATION.—The FIRST

GENERAL ANNUAL MEETING of this association will be HELD at their offices, 1, Adelaide-place, London-bridge, on the 20th April, at One o'clock precisely.
March 22, 1848. GEO. COPELAND CAPPER, Secretary.

PATENT GALVANISED IRON COMPANY.—Trading

under the FIRM of "MALINS & RAWLINSONS."
Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of this company will be HELD at the London Tavern, Bishopsgate-street, on Thursday, the 27th April inst., at One o'clock precisely, to receive the accounts for 31st December last, and to transact other general business of the company. By order of the board.

3, Mansion-house-place, London, April 10, 1848. S. VINCENT, Secretary.

TRELEIGH CONSOLIDATED MINING COMPANY.—

A DIVIDEND of FIVE SHILLINGS per share has been this day declared, PAYABLE on Monday, the 10th of April inst., and on every succeeding Monday, between the hours of Eleven and Three o'clock.—The coupons, with a list thereof, according to a form, which may be obtained at the office, must be left, for examination, two clear days previous to payment.
67, Old Broad-street, April 3, 1848. WM. NICHOLSON, Secretary.

WEST WHEEL JEWEL MINING ASSOCIATION.

Notice is hereby given, that the ANNUAL GENERAL MEETING will be HELD at the company's office, as under, on Monday, the 8th of May next, at Twelve for One o'clock precisely.
57, Old Broad-street, April 13, 1848. WM. NICHOLSON, Secretary.

WHEEL CURTIS COPPER MINING COMPANY.—

Notice is hereby given, that the board of directors have this day made a CALL of TEN SHILLINGS per share on the shares in this company, PAYABLE on or before the 10th day of May next; and the proprietors of shares are requested to pay the said call to the secretary, at these offices, between the hours of Ten and Four o'clock.

Interest, after the rate of £5 per cent. per annum, will be allowed on sums paid in advance; and interest, after the same rate, will be charged on all sums not paid by the day above appointed.
By order, GEO. A. JACOB, Secretary.
Basinghall Chambers, Basinghall-street, London, April 12, 1848.

ASSAYING AND ANALYSIS.—Mr. MITCHELL begs to

inform the MANAGERS, &c., of MINES, SMELTING-WORKS, and MANUFACTORIES, that he still continues to CONDUCT ASSAYS and ANALYSES of all PRODUCTS, metallurgical and manufacturing, at his LABORATORY,
23, HAWLEY-ROAD, KENTISH TOWN, LONDON.

to which address communications are to be forwarded.—Instruction in all branches of assaying and analysis as usual.

ANTIMONY AND SILVER-LEAD MINING AND

SMELTING COMPANY.

1000 shares, of £5 each.

NOW AT WORK ON THE COST-BOOK PRINCIPLE.
Applications for shares may be made to Mr. H. Tripp, Fore-street, Exeter; Messrs. W. King and Co., Newcastle-upon-Tyne; and Mr. Bartlett, 88, Lombard-street, London.

CALEDONIAN RAILWAY COMPANY.—LOANS ON

DEBENTURES.—TENDERS OF LOANS ON DEBENTURE BONDS are now RECEIVED in sums of not less than £500, for any number of years not exceeding five. Interest to be at the rate of 5 per cent. per annum, payable half-yearly, in London, Edinburgh, Glasgow, or in any country bank.

Tenders to be addressed to this office, giving full name and address of lender.—Parties may also communicate with Messrs. Foster and Braithwaite, 58, Old Broad-street, London. By order, D. HANKINS, Treasurer.

Transactions of Scientific Bodies.

MEETINGS DURING THE ENSUING WEEK.

THIS DAY	Asiatic—14, Grafton-street.	2 P.M.
MONDAY	Statistical—19, St. James's-square.	5 P.M.
	British Architects—16, Grosvenor-street.	8 P.M.
	Chemical Society of Arts, Adelphi.	8 P.M.
	Medical—Bolt-court, Fleet-street.	8 P.M.
TUESDAY	Linnean—Soho-square.	8 P.M.
	Horticultural—21, Regent-street.	8 P.M.
WEDNESDAY	Civil Engineers—25, Great George-street.	6 P.M.
	Geological—Somerset-house.	8 P.M.
	London Institution—Finsbury Circus.	7 P.M.
THURSDAY	Synagogue—71, Mortimer-street, Cavendish-square.	7 P.M.
SATURDAY	Royal Botanic—Inner Circle, Regent's-park.	3 P.M.
	Westminster Medical—17, Saville-row.	8 P.M.

On Mining, & the Practical Applications of Geological Science.

PROFESSOR ANSTED'S LECTURES AT KING'S COLLEGE.

LECTURE XX.—MINING FOR METALS CONTINUED.—NECESSITY OF GEOLOGICAL MAPS.—VARIOUS KINDS OF MINING.—OPEN WORKINGS.—STOCK WORKS, &c.—DRAINAGE OF MINES.

Professor ANSTED commenced this interesting lecture, by saying that he had now arrived at the subject of working the mines—the actual economical operations by which the metalliferous ores were obtained; and which consisted of the removing of certain materials, the selection of such as were most valuable, the choice of the spot at which it was best to work, the principles and practice of drainage and ventilation when the mines were sunk, and the modes of obtaining the ore which different and varied circumstances might render it advisable and convenient to adopt.

Before considering these details of practical science, it was necessary to call attention to the extreme importance of geological maps and sections, because much knowledge might be exhibited in this form, and thus be rendered available for the purposes of instruction, besides enabling the miner to understand and recall it himself. The advantage of good geological maps and sections, under any circumstances, was extremely great; but in a district in which mining operations were to be carried on, their absolute necessity was unquestionable. In them was recorded every kind of information respecting the surface—a matter of great moment in the direction of all mining operations; and also the names, nature, and succession of the rocks. By their means, also, we were enabled to understand, in general, the true construction of the earth's crust at the spot selected for sinking, or for other works.

Having learned generally, not only those facts determinable alone by geological observations and on geological grounds, but the circumstances connected with whatever mines might already exist in the adjoining districts; the next thing to be considered by the miner was the particular spot at which it would be advisable to commence operations to obtain the contents of a vein known to exist. And here, again, the study of the geological map was indispensable to trace the actual position of the lodes, and thus enable the miner to carry his works through as many of them as possible, at the least expense.

In order to illustrate his meaning, he had placed upon the table, one of the geological maps of the Ordnance Survey, representing a portion of the northern part of Cornwall. He had selected this particular part of the county, because it was not so eminently a mining district as some of the more southern parts. In the latter, so many trials had been made, and the deeper parts of the earth's surface had been pierced so frequently, that everything relating to it was now known. In the north of the county that was not so generally the case, and there was there a great tract of ground which offered a fair prospect to mining speculations, as it had not been so much tried, and yet promised well for many important ores. The map now before them exhibited a country pretty much of one material (Devonian schist), but with granite appearing here and there—the difference being shown at a glance by the change of colour. To look at an ordinary map of Cornwall, there would be nothing to lead to the conclusion that it was a mining district, except the fact that it was hilly; but it was well known that this was no very important indication, since it was by no means necessary that where there were hills there must also be metalliferous produce. The system of colouring adopted in geological maps would, however, show the nature of the hills, and that they contained rocks of igneous origin, and then it would be understood, from what he had said in former lectures, that there were greater probabilities of metals being found.

Looking at the map before them, it would be seen, that the granite protruding through the other material at so many points was connected with the general structure of the country. It would be seen, that these granitic ridges were in one main direction, and that was a direction which promised a large amount of mineral produce; indeed, the construction being precisely similar, it seemed probable that the northern part of the county might be as valuable as the southern. Looking still further at these granitic lines, it would be found, that they had definite compass bearings; and the whole physical and geological features of the country, disclosed by the map, pointed it out as one likely to contain mineral produce; while the sections taken of the same district tended strongly to a similar conclusion. If this district, as depicted by the Ordnance map, were compared with one which was wholly agricultural, where the surface was covered with a thick vegetable soil, reposing upon rocks of the secondary period, it would present a very marked contrast. In the first place, there would be no granite, and the physical features of the country would not be marked in the same way; there would be nothing like the lines of igneous rocks, with definite east and west compass bearings. There might be as much hill and dale, and more broken and mountainous ground, than in Cornwall; but the geological conditions would not offer the slightest chance for the establishment of profitable workings of this kind. A geological map helped us, therefore, to conclusions as to the real state of the case, in reference to mineral veins—it pointed out the general direction of all the veins, and of everything important in the district—the direction of all the rocks which had reference to veins; and it gave all the information which could be obtained, by laying bare the structure of the country. This was of great utility; and, indeed, without it, they would be mining in the dark, and going on from point to point, instead of taking a general view. In old workings, this kind of knowledge was equally necessary and important—for, without it, there were no true means of determining the real nature of heaves and faults, and the prospects of trial workings.

Knowing, then, from maps and observation, all the various circumstances and conditions connected with the structure of the country, they would be ready to commence working. There were two or three distinct kinds of working, and the mode in which the mine must be commenced depended upon the way in which the ore presented itself. If it consisted of a great mass near the surface, it must obviously be attacked in a different manner than that required by a vein, irregular and expanding at great depths. Thin veins, too, were commonly more variable, being sometimes rich and sometimes poor, liable to be banded in and lost, and requiring to be looked for again. The working of thin veins thus called for special contrivances, and greater knowledge of mining; the methods usually employed he might describe as three in number, and they related—first, to large masses near the surface, obtained by open workings; secondly, to true veins, having considerable magnitude and thickness; and, lastly, to small, or moderate-sized veins. Of these, the two former were not much followed in England—nearly all our metallic produce being obtained from comparatively small veins, although occasionally they were extended into nests and pockets of considerable size.

Open workings were of several distinct kinds. The first he would mention, were those in which the ore was not contained in lodes at all, as was the case with stream-works, where the metal was washed out of metalliferous sands, or where the ore, mixed with veinstone, had been exposed naturally to the action of running water, and had been separated, or, in some cases, remained with sand and gravel. It was, however, only worth while to wash sand in the case of metals of great specific gravity. If, for example, the specific gravity of the metallic ore were only half as much again as that of the stone with which it was associated, this operation was hardly profitable; but when much heavier, as in gold, or platinum, the separation might be readily made. Sometimes this was done by Nature, and considerable quantities of ore were found accumulated in the course of ages in many spots. There were many of these stream-works in Cornwall, where very extensive metalliferous deposits existed; these chiefly produced tin, the ores of that metal being very heavy. Stream-works were the simplest of open workings, and amongst them might be classed the washings of auriferous sands found in stratified beds, as in the gold mines of the Ural. Great quantities of gold and platinum were found in the sand, and obtained by washing. In such cases the ore had been originally derived from the rocks beneath, such as porphyry, quartz, iron pyrites, or clay slate, which in the course of ages became disintegrated, and partly carried to a short distance, the gold being left behind. After a certain quantity of this auriferous detritus had accumulated, it had, in some cases (as in the diagram pointed to by the professor), become covered by vegetable mould. It sometimes happened that, in consequence of this concealment, it was necessary to examine very carefully this golden gravel, and many attempts might be made before a rich portion of the deposit was discovered. There were gold washings also in South America, where there were more than 100 square miles capable of yielding auriferous sand. On the other hand, there were other large districts where, although gold was certainly present, the quantity obtained was not large enough to pay the expenses. In our own country, we had gold in Wales, and some in Ireland, and in the north of England; but the expense of working it had, in most cases, proved too considerable to return a profit. This was an exemplification of the old proverb—"Gold may be bought too dear!" This precious metal was found in Britain in the form of minute fragments. In the Ural Mountains and in South America it was usually in small grains, but some-

times in lumps as large as a nut, though there were instances recorded of fragments upwards of 100 lbs. in weight being found.

The next sort of open mining was that which was practised in Switzerland, and in some parts of Germany, in order to obtain the psiladite ores of those districts, which were often composed in great part of the oxides of iron. These stones were often collected, and sometimes iron was made from them; but he believed that no great quantity of metal was thus obtained. Ores were also found disseminated in friable rocks; but that was an exception to the ordinary rule, and was unknown altogether in England. Proceeding next to open workings on a large scale, he would mention—first, the salt mines of Cardona, in Spain, where large masses of that mineral were found on the hill side, and worked in steps, something like the slate quarries at Bangor. The iron mines in Elba, and those of blende and galena in Tuscany, were also specimens of this kind; and in all these the working might be looked upon as of the most simple description, involving little more than quarrying. Some of the very thick veins of iron ore in Styria were also obtained in nearly the same way. After these came a group of other workings of a rather different kind, in which the metal was found in something of the nature of a gash vein, having an extensive opening at the surface, and filled there with rich and valuable ore, but becoming thin and poor, and dying away entirely, at moderate depths. By far the most extraordinary of this class was the great copper mine of Fahlun, in Sweden. This was the most remarkable mine of this kind in the world; it had been worked for upwards of five centuries incessantly, and the quantity of ore got out was beyond all calculation. In the three centuries up to 1600, the quantity produced was about 4000 tons per annum; and, since that period, a very large quantity had been obtained—though, latterly, it had become poor, and was now almost exhausted. This was a very remarkable instance of thick masses; but the plan of workings adopted at Fahlun, was equally applicable elsewhere, wherever the lode was much more than 10 ft. in thickness continuously; and there were several methods connected with this style of mining. These were seldom required in England. The most remarkable on the continent, after that of Fahlun, were the thick veins in Styria, already alluded to, and some of those in Saxony and the Hartz, as well as other spots not far from the banks of the Rhine. There were also, near Cologne, several extensive workings of this kind in South America. He would, however, illustrate all these by reference to the workings at Fahlun—of which a beautiful diagram was exhibited. This mine was now a circular pit, 60 fms. wide at the surface, and 120 fms. deep, gradually becoming narrower, like an inverted cone. An easy calculation would show what an enormous mass of ore was enclosed between these dimensions—though, doubtless, a great deal of rock must have been mixed up with it. The treatment required in a case of this kind was peculiar, and quite different to other modes of mining. No doubt, at Fahlun, in the first instance, there would not be much trouble about sinking a shaft; but the ore would be raised from trenches; and the lode in the deep, being narrower than it was at the surface, no great deal of management was requisite to prevent a roof from falling in; but, for some years past, this vast excavation had become poor, and shafts were sunk to obtain the small side veins which were still of some value.

In other cases, two or three modes of open working presented themselves—the first applicable when great masses of ore, or metal, appeared at the surface, in this case we might cut away portions in galleries, leaving pillars standing. This might be done gradually, and in a system of honeycombs—the rubbish being left to support the roof when the pillars were removed; but when the mass was very considerable, it was difficult to fill in these vacant spaces; and, unless that were done, there was no safety in removing the upper part. The usual method, in ordinary mining, was by *stoping*; but the principal difficulty, in very thick lodes and soft ground, was the support of the roof. When the ore was extremely abundant, it might not be worth while to incur much trouble, or expense, in getting out the whole of it, as the cost might then be greater than the price in the market. The guide, in all these cases, must be the market value of the ore. More might be paid in raising any kind of ore than could be got for it; but this, he need not remind them, was very bad economy, though not quite so rare as might be supposed. This was the case even with very valuable metals and ores. Thus, the actual cost of mining required to be considered with reference to the actual market value of the produce at grass. He might instance copper ore, which often varied in its value from 30s. or 50s. per ton to 200s. or 300s., and other ores in the same way according to their richness or poorness; but it might pay better to get the poor ores than the rich ones, and if the expenses were such that the profit was only moderate on ore which fetched 200s. per ton, there must be a heavy loss, other circumstances being the same, on ore which cost as much for raising, and would, after all, only sell for 15s., although that in general was a high price.

The talented lecturer proceeded next to consider the working of veins of a moderate thickness, which involved the principal kinds of mining operations in this country. These were chiefly with reference to the methods of working adopted in two districts—Cornwall and the north of England. The mining in Wales, in Ireland, and in Scotland, was usually carried on by one or other of the methods in use in the principal districts. These methods involved very distinct operations—one of the most serious of which in Cornwall was drainage; while on the continent the miner was mostly spared any very large outlay in respect to water. In England, however, all methods of mining had reference to the presence of water. The first operation of mining, on a large scale, when the lodes were of moderate thickness, was either to sink a shaft, or to drive a level. The shaft was usually sunk either on the lode, or to the lode. In the first case we commenced at the outcrop, and went down on the lode; and this might, at first sight, seem the best plan, but it was not so in reality, when any great depth was required. In consequence of the usual inclination of lodes, sinking on the outcrop was, generally speaking, not to be recommended. They must, therefore, be prepared to go down through unprofitable ground, with a view of falling in with the vein in the deep; and the distance which would have to be gone through, before this took place, would depend upon the inclination of the lode—the nearer to the perpendicular the greater the depth—and was a matter of calculation.

When any great depth was attained, it was necessary to commence draining operations, and a gallery for this purpose was cut from the shaft to the nearest outcrop which would give a sufficient fall for the water. It often happened that this gallery was commenced on the hill side, simultaneously with the shaft, and not unfrequently it preceded the shaft, and nice calculation was requisite to ensure their meeting at the required point on the lode. In order to get rid of the water, a horizontal gallery was usually driven from the lowest practicable point to the lode. This gallery was called the *adit level*, or *draining level*; and, as it was one of the most important in the mine, it required careful calculation, in order that it might be effected properly.

It was easy to see the necessity of this. Of course, the further the shaft went down, the more water would drain into it; and the lower down, therefore, the adit level was constructed, the smaller the height the water would have to be raised. If the mine was one which was likely to be very valuable, it might be worth while to carry the adit level to a great distance, in order to save a few feet in the pumping up of water. He had known 20,000 ft. or 30,000 ft. expended in this way, for the purpose of saving a single foot of water. The calculation by which the shaft and the adit level, when commenced simultaneously, were brought together at the required point, was a surveying operation; but it was rather more difficult than the construction of a tunnel for a railway, or anything of that sort ordinarily was, because the presence of the ores rendered the dialling more uncertain. In ordinary dialling, it was important to watch continually for the least variation in the compass; and by such careful observations only could perfect precision be secured in thus connecting distant points by underground works. In some mines, however, there was so little iron, that the compass was not affected; but mostly there was so much of that metal in the back of every lode, and associated with the country close by, that it was necessary to be cautious in all cases. Besides the ordinary dial, there were also used circumferencers, on the theodolite principle, for the purpose of surveying without the magnetic needle.

The following lecture, which describes the other details of mining operations, and many important facts connected with them, will be given at length in our next week's Journal.

On the Composition of Coal Gas, and its Combustion.

DR. A. W. HOFMANN'S LECTURE AT THE ROYAL COLLEGE OF CHEMISTRY, HANOVER-SQUARE.

[Concluded from last week's Mining Journal.]

In the preceding portion of this important lecture, Dr. Hofmann gave a brief history of the introduction of gas, and then proceeded to discuss the composition of coal-gas. He exhibited tables (given in our last) of its constituents, in two groups, the first of which comprised substances which were solid or liquid, at the ordinary temperatures; and the second, the compounds which presented themselves in the form of gas. He then proceeded to describe, separately, the gaseous constituents of coal gas, as set forth in one of the tables, exhibiting the peculiar luminous and other qualities of each, by a variety of experiments. The constituents described in our last were, *hydrogen*, *light carburetted hydrogen*, or *marsh gas*, and *olefiant gas*. Our report now proceeds with the description of the remainder of these constituents.

The next constituent was the *volatile hydro-carbons*—with respect to which, at present, there was not much known. The first table contained the names of several substances which had been extracted from the liquid products of the distillation of coal, called *tar*. These substances differed much with regard to their physical properties—some of them boiling only at very high temperatures, while others volatilized at a heat far below that of boiling water. It was evident, then, that the gas, generated along with these liquids in the retort, would carry off a certain quantity of these hydro-carbons—varying with the distance from the works at which the gas was examined. The great importance of these hydro-carbons in the luminous effects of coal gas would become obvious if their composition were considered. Benzol, for instance, contained not less than 92 per cent. of carbon—a far greater amount than that of even olefiant gas itself. This was proved by inducing a small quantity of the liquid, so as to allow it an insufficient quantity of oxygen for complete combustion; and, in this way, a large portion of the carbon was separated. When mixed, with a due amount of oxygen, the combustion of this liquid afforded a splendid light.—[The talented lecturer showed this, by passing a current of atmospheric air through the lighted Benzol; and also illustrated the peculiarly rich illuminating power of this

THE CHINESE FABLE OF THE CREATION.—The rationalists have penetrated furthest into the Dædalian mystery of this cosmogony, and they go on, to show what Pwanku did, and how he did it. They picture him holding a chisel and mallet in his hands, splitting and fashioning vast masses of granite floating confusedly in space. Behind the openings his powerful hand has made are seen the sun, moon, and stars, monuments of his stupendous labours; and at his right hand, inseparable companions of his toils, but whose generation is left in obscurity, stands the dragon, the phoenix, and the tortoise, and sometimes the unicorn, divine types and progenitors with himself of the animal creation. His efforts were continued 18,000 years, and by small degrees he and his work increased; the heavens rose, the earth spread out and thickened, and Pwanku grew in stature, each of them 6 ft. every day, till, his labours done, he died for the benefit of his handiwork. His head became mountains, his breath wind and clouds, and his voice thunder; his limbs were changed into the four poles, his veins into rivers, his sinews into the undulations of the earth's surface, and his flesh into fields; his beard, like Berenice's hair, was turned into stars, his skin and hair into herbs and trees; and his teeth, bones, and marrow, into metals, rocks, and precious stones; his dropping sweat increased to rain, and lastly (*nasutus ridiculus mus*) the insects which stuck to his body were transformed into people.—*The Middle Kingdom.*

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the treatment of auriferous pyrites as pursued at Marmato.]

Mining Correspondence.

ENGLISH MINES.

BARRISTOWN.—Captain Thomas Angove (April 7) reports.—We have drawn the water out of Nangle's shaft as low as the back of the old workings, but are not yet able to clear the attic. The adit end east is producing about 4 tons of lead per fm.; the back of the adit level, working on tribute, is much the same as last reported; also the pitches in the old mine. The eastern flat-roof shaft has been sunk between 3 and 4 fms.; we intend driving after sinking 3 fms. further.

BEDFORD.—Capt. Thos. Ellery (April 12) reports.—At Wheal Marquis, the 130 ft. level, east of the sump-winch, is 3 ft. wide, and worth 26l. per fm.; the lode in Hodges's rise, in this level, is 2 ft. wide, producing good saving work; and in the stopes, in the back of this level, the lode is worth 50l. per fm.; there has been no lode taken down in this level since my last report. The lode in the 80 fm. level east is 2 ft. wide, producing good stones of ore. In the 70 fm. level east the lode is composed of spar, mudiic, and ore. There has been no lode taken down in the 47 fm. level east. At Wheal Tavitack, the lode in the 47 fm. level, west of Phillip's shaft, is 2 ft. wide, composed of spar, mudiic, and ore—a kindly lode. The lode in the 25 fm. level, east of the south engine-shaft, and in the adit level east, on this lode, remains without alteration.

CALLINGTON.—Capt. J. T. Phillips (April 10) reports.—The lodes in the 50 fm. level east is 4 ft. wide, with good stones of copper ore, and promising improvement. In the 70, the lode is 3 ft. wide, with stones of copper ore—there appears to be a branch gone off to the south, which we shall prove in the course of a few days; the lode in the stopes is 7 ft. wide, and will produce 10 tons of copper ore per fm. In the 100 fm. level south the lode is 6 in. wide, work of a moderate quality. In the 90 fm. level south the ground is favourable for driving, and the back will work at a moderate tribute; in the north end, a branch of the cross-course is come in with the lode, which is poor—the air is so deficient here, that we are obliged to suspend operations. In the 125 fm. level north, at the south mine, the lode is small, producing silver-lead ore. In the 112 fm. level north, we are opening tribute ground; in the south end the lode has a very promising appearance, not taken down. In the 100 fm. level north we are through the elvans, the lode has not been taken down. We have divided a parcel of copper ore, computed 100 tons—expect to weigh and sample to-morrow.—Since writing the above, Capt. Barrett informs me the side branch in the 70, cut into on Saturday and to-day, is a fine branch of copper ore, 2 ft. wide; this cut is made on the south side of the level, some 6 or 8 fms. back from the end.

COATLITH HILLS.—The mine agent (April 8) reports.—During this week the men have been again employed in the winze from the level north of the horse level, and have just cut into the vein; and, from what we have seen, it has a promising appearance, but poor, which I expect will be the case until we sink deeper into it, and have both walls of hazle; the vein throws up the south wall between 3 ft. and 4 ft.

COMBLAWN.—Capt. Hosking (April 3) reports.—Saturday being our regular setting day, I have set the men to drive and cut the lode, at 7l. 15s. per fm. They are to work regularly from Monday morning (six o'clock) to Saturday night (six o'clock)—relieve in place. There are about 2 fms. 4 ft. 6 in. more to drive, and I sincerely hope that the surface water will hold out for us to see the lode.—April 10.—The driving north, in the 20 fm. level, is progressing favourably since last report (March 27); we have driven 8 ft. 9 in.—consequently, we have 9 ft. 3 in. more to drive to intersect the main lode. The surface water is holding out much better than I expected, and the water in the shaft, &c., has fallen off considerably, so that we expect to cut the lode sooner than we anticipated. We have been rising the collar of shaft No. 2 on the main lode, putting in footway, fixing tackle, &c., preparatory to sinking.

CWM ERFIN.—Captain Samuel Nicholls (April 8) reports.—I have to-day set six men to sink the shaft at 7l. per fm. for the month—this is up to the 13th May—also, the eastern level, driven by four men, for the month, at 4l. per fm. The stopes, west of the whim-shaft, by two men, at 2l. per fm.; this stopes is the same as last reported. The stopes, east of whim-shaft, by four men, at 2l. 5s. per fm.; I think it proper to put two men more in this stopes, as we are looking very well at present—full 1 ton to the fathom. The stopes, east of the eastern shaft, by two men, at 2l. 5s. per fm. I think we shall raise this month 10 tons of ore, if the ore continues as it is at present. We have about 8 tons for the last month.

DEAN PRIOR AND BUCKFASTLEIGH.—Capt. H. Choake (April 13) reports.—We have cut through the lode in the 20 fm. level near the present end, being nearly 7 ft. wide, but at present unproductive; there is no particular alteration as to the appearances of the lode in the pitches; the tributaries are working with spirit. I have much pleasure to state, also, that we have cut the lode in the 80 fm. level, which is of a very encouraging character, much better than I expected to find it at that point opposite the shaft, as the lode was disordered in the level above; we have cut into the lode about 3 ft., but have not as yet discovered the south wall—the lode is ore throughout, saving work; from the present appearances of the lode in this level, and the improvement that has taken place, I do not hesitate to say, and that it is my real opinion, that we shall have a lasting and a profitable mine. We are getting on with dressing the ores, and shall be prepared to sample a parcel by 19th or 20th.

DEVON AND COURTENAY CONSOLS.—Capt. H. Seccombe (April 11) reports.—In the end driving west, on the gossan lode, we have driven about 10 ft. on the course of the lode, and have now intersected another cross-course (on a western part of the same we last cut); on this we are again driving to intersect the gossan lode to the west of it; the ground is favourable, and stones and small branches of ore are frequently seen by the workmen in the course of their operations. In the end driving east, on the gossan lode, continues to be divided into small branches, containing spar, mudiic, and ore. In the end driving east, on the south lode, the lode is at present small, yet continues to produce some tolerably good stones of ore. In the engine-shaft, the sumpmen have also discovered the cross-course that we have in the 80 fm. level; this will, in the course of the shaft passing through it, yield some advantages for the men for sinking.

DRAKE WALLS.—Capt. R. Williams (April 8) reports.—Brenton's engine-shaft just as last reported; stopes east of Brenton's, below the 40, good branches of tin; stopes west of machine-shaft, below the 40, good branches; stopes east of machine-shaft, below the 40, saving work. Machine-shaft, sinking below the 50, very good branches of tin; end of machine-shaft, below the 33, poor at present, being disordered by a cross-course; stopes, behind this end, good work; end east of footway shaft, below the adit, branches small, and not rich. New engine-shaft has improved for tin in sinking. The men on the north, or copper lode, are driving by the side of the lode, the ground being too expensive to drive in the lode.

EAST CROWDALE.—Capt. Stephen Paul (April 8) reports.—The plat is cut, and engine-shaft cased and divided to the 58 fm. level, and every preparation made to drive to cut the main, or Crowdale lode, and also the north lode in that level. The 47 fm. level, driving on the course of the north lode, is looking better than it has for several fathoms; there is not much doubt, from the appearance of the lode in this place, but that we shall have a branch of ore shortly; the rise and stopes in the back of this level are looking very well; the lode is, on an average, 20 in. wide, worth 10l. per fm., composed of peach, mudiic, spar, and copper ore. In the winze sinking below the 47 fm. level east, the lode is improving both in size and appearance, and is now 20 in. wide, with a solid leader of copper 9 in. wide, and every indication that it will increase; this looks well for the 58 fm. level. We have again commenced sinking the engine-shaft. At Rix Hill, the lode is 2 ft. wide, composed of peach, capel, spar, elvan, and spots of tin. The engine-house at Rix Hill is completed and roofed. Our engine and pit work are in good order.

GADAIR MINES (ANGLESEY).—Capt. H. F. Stephens (April 14) reports.—Having, at your request, visited the mining settlement held by you, on the Gadair Mountain, in the Isle of Anglesey, accompanied by Mr. English, and several members of your board, and others interested, I now hand you my report thereon—in doing which, I must necessarily be brief in my observations as regards the extent of the tract, and its geological features—the time occupied being limited, and my attention being more immediately directed to the several workings and lodes opened upon, or seen at surface. The sett, as pointed out to me, appears to be very extensive—being, I should suppose, fully 1½ mile in extent east and west, and 1 mile in a north and south direction. Its situation, as shown on the map, is one of the northernmost points of the Island of Anglesey—the Skerries Lighthouse being immediately north; and it is at this part of the sett, that several of the lodes show to surface, and in the cliffs. The first lode to which my attention was directed is known as the Hound's Cave lode; this has been driven on, by adit level, for a distance of 200 fms., at a depth from surface, in the present end, of 8½ fms., and two shafts sunk; it has also been opened upon at surface some 5 or 6 ft. in depth, about 40 fms. east of the present end, where the lode is kindly, and showing spots of ore. A shaft has been sunk, at the tail of the adit, to a depth of about 9 fms., which, however, is not, at this moment, being prosecuted, from the want of power to meet the coming water. In the course of the several workings, ore of a rich quality—judging from that obtained from the attic, and the stones broken in the course of the present workings—has been obtained; but it cannot be expected, that any returns, of a considerable nature, can be made, until the mine is opened to a greater extent, and the engine-shaft put down to a depth of some 40 or 50 fms., and cross-cuts put out, to take the lode, as I shall hereafter endeavour to describe. The nature of the country is easy of driving, and, with energy, much may be done in a comparatively little time; about 60 fms. south-west of this lode is another, designated the west point lode, which inclines towards the former, and will intersect it at 240 or 250 fms.—this is a promising lode; and, judging from analogy, there is every reason to believe that, at the junction of these lodes, they will make a bundle of ore in depth—while the two still, in all probability, fall together and make a master or champion lode; at the same time, it may be observed, that this reasoning is founded not only on the ordinary course of things, but from the encouraging appearance of the lodes and strata of the country. Again, in this direction, at a further distance of about 60 fms., running nearly parallel with the lode first named, is one which shows itself in the cliffs, known as the Fox lode; this seems to be a westerly lode, and is intersected, or crossed, by two or three other lodes in its course—one of which, carrying mudiic, is nearly north and south;

while another, nearer east and west, will form a junction in driving 40 to 50 fms.—on which an adit level has been already commenced with that object. There are other lodes more inland, which have been looked upon; but nothing further done than proving their existence. In addition to the mineral lodes which I have thus briefly noticed, there are other valuable adjuncts connected with the sett, which must not be passed by unnoticed upon; at the same time, I may state, my attention was more immediately directed to the mineral resources it possessed—these are the fire-clay and marble—which hold out good promise; the former is found in a cross-course, running nearly north and south, about midway of the property, on the eastern side, and is there found 9 to 10 ft. wide—its immediate outcrop to the point of shipment tending to enhance the value of this material, which will afford a remunerative return, assuming it to be of that superior quality as represented. The marble may be raised in blocks of considerable size, and, judging from the specimens I have seen, I should consider it will, when fairly introduced in the market, form an important feature of the company's concern, associated with the mineral deposits. Having thus observed, however, briefly on the main features presented by the undertaking, I will at once proceed to report to you on the measures I would recommend for effectually working the mine, and also give you my opinion as to the results which I consider may be calculated upon with the application of ordinary skill and energy, assuming that an ample capital is provided—for it is hardly necessary to say, that time is money; and that the sooner the object is accomplished, the greater is the amount saved, more especially in mining operations, which are necessarily confined from their nature. In the first instance, I should recommend that an engine—say, 36-in. cylinder—should be at once acquired, and placed at a point, so as to command the two first-named lodes, with the view of intersecting the Hound's Cave lode at a depth of from 40 to 50 fms. This engine would, I have no doubt, be equal to go down 60 to 70 fms., judging by the present water, but which, I may observe, I consider only as a trial engine; as in the course of exploration, and proving the lodes, there can be no doubt that a second or third may be required of far greater power; yet I should not, at the moment, recommend one beyond that named; it would be necessary to put down an engine-shaft—say, to the depth of 45 fms.—to take the Hound's Cave lode, and drive cross-cuts at certain points to intersect that and the west point lode, as also to continue the adit level on the former. I should further recommend, that operations be carried on at the Fox lode, and those immediately contiguous, and that the lodes be further proved, or traced, by costeaning, or otherwise. The several buildings—as engine-house, smithy, &c.—require to be erected forthwith; and to effect all of which, I consider the sum of 3500l. will be necessary—at the same time, that I do not make any allowance for returns of ore which may be made, assuming that the amount shall be expended without any results, which, however, I do not contemplate will be the case; yet I do, I consider, best, at all times, to be on the safe side. I shall be happy to attend the committee, to enter into detail, or to furnish them in writing, when called upon, but presume that the information conveyed herein is such as will be deemed sufficient. In closing this report, I have only to state, that, having had an opportunity of consulting with Capt. Dyer, Capt. Tucker, Mr. English, and others, having a perfect knowledge of the district, and more especially this sett, I have no hesitation in expressing my opinion, that with economy and perseverance—the being, at all times, borne in mind, that ample capital be supplied, and confidence reposed in your agent—the outlay on the mine may be considered as an investment, from which you may, with confidence, calculate on handsome returns.

GREAT MICHELL CONSOLS.—Capt. T. Richards (April 12) reports.—That the lode in the sump winze is at present producing but little saving work; the north part of the lode now being carried about 5 ft. wide, contains mudiic, ore, fluor, and spar, altogether exceedingly promising; the ground is easier of progress, and should it continue as it now is, we shall be down to the 45 in about three weeks from this time. In the 35 fathom level, west of the sump-winch, the lode has a very promising appearance, consisting of mudiic, spar, and ore, producing some saving work, and opening tribute ground.

HEIGSTON DOWN CONSOLS.—Capt. Thos. Ellery (April 12) reports.—The lode in Bailey's engine-shaft is 4 ft. wide, producing good stones of tin—a strong, kindly lode. The ground in Buddle's adit level north is without alteration.

HOLMBUSH.—Captain William Lean (April 11) reports.—We are making every preparation necessary to commence sinking the diagonal shaft below the 132 fm. level. The lode in the 120 fm. level south is 3½ ft. wide, composed of spar and stones of lead—saving work; the rise in the back of this level is communicated to the 110; we shall, therefore, resume driving the 120 fm. level north. The lode in the 110 fm. level south is 4 ft. wide, composed of quartz and lead, worth 6l. per fm.; the lode in the stopes, in the back of this level, is 5 ft. wide, composed of quartz and lead, worth 5l. per fm. The lode in the 100 fm. level south is 2 ft. wide, composed of spar and stones of rich silver-lead ore—saving work; the lode in the winze, sinking below this level, is 2½ feet wide, composed of spar and lead, worth 15l. per fm. The flap-jack lode, in the 100 fm. level east, is 2½ ft. wide, composed of mudiic, spar, and spots of copper ore, with a regular underlie north, of 18 in. in a fathom. The lode in the 90 fm. level south is 2 ft. wide, composed of soft spar, prian, and lead—saving work. The lead pitches, on the whole, are producing a fair quantity of mineral.

KIRKCOBRIGHTSHIRE.—Capt. John Buzzo (April 8) reports.—In the 50 fm. level, west end, we are cross-cutting north, to intersect the lode in the winze; as stated before, the ground is rather hard for spending, and as yet unproductive. The lode in the 40 end west is 3½ to 4 ft. wide, producing stones of ore—rather a stiff end; there is a pitch in the back of this level, a few fathoms behind this end, which we expect to hole to a winze sinking under the 30 fm. level; the lode in the end east, on the caunter in the 40 fm. level, is about 3 ft. wide, producing about 5 cwt. of lead per fm. The lode in the 30 end west is 4 ft. wide, producing 4½ of a ton per fm.; in the end east, in this level, the lode is not yet properly defined; it produces stones of lead, and we expect soon to see an improvement. The lode in the bottom of Keith's shaft (now 6 fms. under the 30 fm. level) is 3½ to 4 ft. wide, producing upwards of a ton of lead per fm.

LEWIS.—Capt. Samuel Noell (April 1) reports.—The ground in the 70 fm. level south is harder than usual; but is a very promising strata for tin. The 60 east is suspended, until we have holed the winze to this level, which is sinking below the 50 for a better ventilation. The lode in the 60 east, on south branch, which is 6 in. wide, is producing some good work for tin; but not so rich as last reported; the lode in the 60 west, on south branch, is 18 in. wide, producing 25l. per fm.; the lode in the 50 east, on south branch, is 8 in. wide, producing good quality tinstuff, and very promising. The lode in the 40 east is 6 in. wide, worth 4l. per fm. The lode in the 20 east is 2½ ft. wide, and opening good tribute ground. We sold, yesterday, 17 tons 3 cwt. 1 qr. 18 lbs. of tin, worth 744l. 15s. 6d.

—Captain Samuel Noell (April 8) reports.—The lode in the 70 west is 1 ft. wide, producing some tin, and very kindly. The ground in the 70 south is hard; but we expect to cut the south branch at or about the end of this month. The lode in the 60 east, on south branch, is much the same as when last reported. The lode in the 60 west, on south branch, is 18 in. wide, worth 30l. per fm. The lode in the 50 east, on south branch, is 8 in. wide, worth 8l. per fm. The 40 east, on south branch, is suspended, in order to sink a winze from this level to the 50, for a better ventilation. The lode in the 20 east is 2 ft. wide, yielding fair quality tinstuff.

MENDIP HILLS.—Capt. F. C. Harpur (April 10) reports.—I have placed some men to remove the top rubbish, from off the beds of clay, to the east of our present workings, where we find it to be about 9 ft. thick; the claystuff which we are now removing to the washing floor is rather coarse work, being intermixed with a large portion of mud, although the quality of the clay is good, as we extracted from the furnace, on Thursday last, 16 cwt. 2 qrs. of lead, being the greatest quantity hitherto produced in one day. The lode in the 38 fm. level, south of shaft, is at present very small, composed of iron and spar, ground hard for driving.

SOUTH MOLTON CONSOLS.—Capt. George Chown reports.—We have at last succeeded in getting our mine in fork, which we have accomplished with a horse engine, and find her as follows:—The shaft, an underlay one, is sunk to the depth of 18 fms. below the adit, or 23 fms. from surface, through a shoot of ore taking a northerly dip; the lode in the stopes, on the north side of the shaft, is about 2 ft. wide, composed of quartz, white iron, and blende, with spots of copper and mudiic, and carries a solid leader of silver-lead, varying in width from 6 to 9 in., worth about 15l. per fm.; the lode on the south side of the shaft is 2 ft. wide, carrying a rich leader of ore, from 8 to 10 in. thick, and worth 18l. per fm. In the 12 fm. level (the bottom of the mine) the lode is 3 ft. wide, composed of white iron, quartz, blende, copper, and mudiic, and carries a solid leader of silver-lead, from 8 in. to a foot thick, worth about 25l. per fm.; in this level there is a fine pile of work, broken by the former company, containing many tons of ore, but which must remain in its present position, until our engine goes to work—the water being so quick as to prevent our taking it away. Our manager (Mr. P. Clymo, of Liskeard) inspected the mine on Tuesday last, and ordered an engine-shaft to be commenced and sunk with all possible dispatch; we hope to have the engine at work in the course of two months; our lode (a north and south one) is located in a beautiful hill; and, as regards composition, is precisely similar to the celebrated Comb Martin lodes, from which such immense returns have been made from time to time. In conclusion, I beg to say, that there is not the least doubt of our having a splendid mine.

SOUTH WHEEL TRELAWNY.—Captain William Jenkin (April 10) reports.—Snell's engine-shaft is in course of sinking with nine men; ground more favourable than when last mentioned; down 29 fms. under adit, with spots of copper ore and mudiic; water just the same as last mentioned.

TAMAR SILVER-LEAD.—Capt. J. Sprague (April 10) reports.—In the 175 end, the lode is 18 in. wide, composed of capel and ore—good saving work. In the 160 end, the lode is 6 in. wide, producing a small quantity of ore. In the 145 end, the lode is 2½ ft. wide, 18 in. of which is yielding work of a good quality. In the 135 end, the lode is 3 ft. wide, composed of can and ore—work of a promising appearance. At the north mine, in the 70 fm. level, the lode is 3½ ft. wide, 8 in. of which is rich work. In the 50 fm. level, the lode is 18 in. wide, interspersed with ore—good stamp work. We sampled, on the last inst., 84 tons 8 cwt. of silver-lead ore, which sold for 1388l. 2s. 10d.

TIN VALE.—Sub-Capt. Henry Hooper (April 11) reports.—I am happy to inform you we have tin ready for the smelting-house. This belongs to the first part of tributaries, and we are making all haste to get round the rest, that it may be carried together. The stamps are working first-rate. There is no material alteration in the south cross-cut; the ground is hard, but streams of water issuing from the same. The middle lode is very kindly, but not rich. The north lode, or channel of branches, is producing good tin, and seems to make its course very regular to the hills; there are four branches, composed

of spar, capel, and tin, intersected with white, beautiful granite. The branches are 4, 5, and 6 in. apart, making a gennie, from 20 in. to 2 ft. wide. Capt. Phillips called here last week, and was exceedingly well pleased with the mine. He spoke in high terms of the quality of the tin. He did not go underground, but, from the various tin-stuffs on the surface, expressed a good opinion of the mine, and said he had known branches of the same description which had made very permanent mines, now at work. I leave other particulars for my worthy captain on his return.

TRELEIGH CONSOLS.—Capt. W. Symons (April 8) reports.—In the 120 cross-cut, north of Christos's, we cut the lode west of the slide. In the 100, east of Christos's, the lode is about 10 in. wide, with but little mineral, but is rather improved in appearance; Garden's shaft, below this level, is sinking in the country; in the same level, west of ditto, the lode is 3½ ft. wide, with stones of ore only; in the same level, east of ditto, the lode is 3 ft. wide, looking more promising, with stones of ore, but not to value. In the 90, west of ditto, the lode is 20 in. wide, worth 4l. per fm. In the rise above the 80, the lode is 15 in. wide, with stones of ore, but not to value. In the 70, west of ditto, the lode is about 1 ft. wide; this has a better appearance, and is producing a little ore. In the 60, west of ditto, the lode is 3 ft. wide, worth 20l. per fm. In the rise above the 60, the lode is 2 ft. wide, not so good as last week—worth 3l. per fm. In the 50, west of ditto, the lode is 10 in. wide—no mineral. The adit, east on Wheal Parent, driving on the north part of the lode, is 2 ft. wide, with good stones of ore. The adit cross-cut, north from engine-shaft, to cut Wheal Orphan lode. Pitches much the same as last week. We expect to sample next week from 130 to 140 tons.

WEST WHEEL JEWEL.—Capt. R. Johns (April 10) reports.—In the winzes in the bottom of the 57 fm. level, west of Williams's cross-course, on Wheal Jewel lode, the lode is 18 in. wide, worth 8l. per fm.; no lode taken down in any other part of the mine in the past week. In the 30 cross-cut, south from Tolcarne tin lode, we have intersected a small lode in the past week—unproductive. In the deep adit, west of Quarry shaft, on Tolcarne tin lode, the lode is 2 ft. wide, worth 4l. per fm. In the stopes in the back of the 12 fm. level, west of Quarry shaft, on same lode, the lode is 4 feet wide, worth 27l. per fathom.

WEST WHEEL MARIA.—Capt. Thomas Rodda (April 11) reports.—The western engine-shaft is down below the 64 fm. level about 7 fms.—the ground in which is much the same for sinking as last reported. The 84 fm. level, west of Vivian's shaft, on the south lode, is without important alteration.

WHEEL ADAMS.—Capt. J. Prince (April 11) reports.—We have made preparations to resume clearing the new engine-shaft, below the 50 fm. level, and we shall recommence doing so in the course of the present week. The shaftmen are at present engaged in extending the 50 end south on the quartzose lode, which is 2 ft. wide, worth 9l. per fm. A large stream of water issues from the back of the level, which at present makes a difference of 8 strokes a minute to the engine. We expect, however, that, by driving a few feet further south, the ground will be drained. We beg to hand you the setting-sheet for April month.

WHEEL BENNY.—Capt. John Tabb (April 8) reports.—I have this day dialed the ground from the cross-cut south, calculating the lodes underlay to be 3 ft. in a fathom; I find we shall have 36 fms. further to drive, and have also looked at the lode—it is a strong, fine champion lode, and will be prosecuted for little expense. The Ford shaft will reach the 30 fm. level about the middle of June next. I purchased the pumps at Gunnis Lake sale at 4s. 9d., 3s. 3d., and 5s. 9d. per cwt.; the whole lot, without the auctioneer's money, will not amount to 11l. We have the lift complete for the 30 fm. level.

WHEEL TRELAWNY.—The mine agent (April 11) reports.—We have commenced driving on the lode, in the 62 fm. level (Phillip's shaft), where the ore part is 2 ft. wide, composed chiefly of can, with hornspar, mudiic, and lead, worth 10l. per fm.; the average underlay from the 52 to the 62 fm. level being 10 in. per fm.—making the cross-cut in the 62 fms. 5 ft. 6 in.; I find, by assays, the ore to be much richer for silver in this level than it is in the 52; we removed the men, to sink the shaft again with all possible speed, and have set them a bargain, to sink 6 ft. in the shaft, and cut a triplat 12 ft. long, 12 ft. wide, and 7 ft. deep, for 40l.; this sum includes all costs, drawing, &c. The lode in the 52 fm. level, north and south, is very similar to my last report; the stopes, in the back of this level, are not looking so well as was last reported, but are producing a fair quantity of ore. The lode in the 42 fm. level north is without any material change; the stopes, in the back of this level, are a little improved. The lode in the 32 north is worth 10l. per fm.; the stopes, in the back of this level, are producing a fair quantity of ore. Trelawny's engine-shaft, and the cross-cut east, are still progressing satisfactorily. At Vivian's shaft, in the 30 fm. level north, the lode is not so good as was last reported, but is still opening ground that will pay for stoping.

FOREIGN MINES.

ALTEN MINES.—Mining report from the 8th to the 21st Feb.:

Raipas.—No alteration is perceptible in the various workings since my last report. The ground in Monk's shaft is still favourable for sinking, and we expect to reach the level of the 20 towards the latter end of next month. We are sinking a winze from the 5 to the 10 fm. level, and hope to hole in the course of a few days, and shall immediately afterwards commence stoping away the ore part of the lode. The 5, 10, and 15 fm. levels have not deteriorated; neither is there any improvement to be noted. The 20 fathom level, towards Monk's shaft, has made good progress; 2½ fms. of ground have been excavated; it is still in the peculiar jaspery clay-slate stratum, which cut off the ore in the No. 11 stopes some years ago; the direction and dip of this stratum is widely different from the strata found at the surface; and the 20 fm. level, which now penetrates it, will be of great importance in determining its influence on the lode. The continued low percentages of the ore cause us some uneasiness; but, in the course of a few days, we shall make a return to the smelting-house, which I hope will be found of a better quality.

United Mines.—We have here also been subject to the usual fluctuations—some of the stopes have fallen off, and others have improved; so that, on the whole, we are enabled to maintain our usual regular returns. The workings at Woodfall's are much incommoded with ice and water, and some profitable parts of the lode are, in consequence, suspended. The good prospects presented by Hoskins's lode have again deteriorated, but the tributaries continue to make profitable returns.

Typer's has not improved; the new sink contains a little ore, but will not return sufficient to pay the cost. Unless this mine improves before the end of the week, we shall suspend further operations here until the summer, when we hope to be able to resume the surface workings with our usual good success.

Maneur's.—The stopes in the old workings is looking rather better, and has latterly been yielding ore enough to pay the cost.

Michell's.—The great accumulation of water and ice has completely driven us from our best and most profitable workings on the old north lode; our produce from hence will, in consequence, be less than formerly. I fear we have not much chance of increasing it before the summer, when we shall be able to resume the usual tribute pitches now enveloped in ice.

Old Mine.—The eastern pitch, above the adit level, east of Bergmeister's, has improved, and the tributaries are making a good return of ore. The other workings continue as last reported.

Powder House.—This mine continues to yield small but profitable returns; the produce is regular, and has not hitherto experienced the fluctuations which have been found at the other mines.

New Lodes.—The tributaries have resumed operations in Mathisen's Valley. We have increased the price of their ore, and have otherwise rendered them every assistance in bringing it down. This working is situated in a steep and dangerous part of the mountain, and the whole of the produce must at present be borne some distance on men's shoulders in sacks. After a heavy fall of snow, we have latterly been subjected to gales of westerly wind, accompanied with heavy rain. The weather is still unsettled, and much damage has been done to our jetties, &c., by the drift ice on the fiord. I must here beg to correct an error in my last report; in alluding to the temperature, it should have been 45° below the freezing point of Fahrenheit's scale, or 13° below zero. We have again commenced with the returns of ore from the several mines; and, with next post, I hope to have the honour of waiting upon you with the usual delivery note.

ACCIDENTS.

Manchester.—As A. Green was engaged in clipping and widening a coal-pit, belonging to Messrs. Nuttall and Caldwell, the scaffolding upon which he was standing gave way; his head, of course, life was quite extinct when he was discovered, and his corpse was mutilated in the most frightful manner—his head being completely flattened, and his brains scattered about in all directions.

Whitcomb.—W. Tinkler was accidentally killed whilst at work in William Pitt, by a quantity of roofing falling upon him.

Waterhampton.—A poor miner, named D. Bradley, was killed by a fall of coal, at the pit of Messrs. Blackwell, Old Dock, while in a sitting posture, giving instruction, as a "doggy," to some of the men, respecting the working of the pit. At the same time, H. Marsh, T. Cadman, and S. Heathcock, who were standing near the deceased, were also injured—Marsh sustaining severe injuries about his head, back, and left foot, which is dreadfully crushed.

Sutherland Colliery, Tividale.—As Chas. Silvers was engaged in leading a horse with a loaded skip down an inclined gate-road of a pit, worked by Messrs. Wagstaff and Skidmore, he lost all command of the animal, which knocked him down, and the loaded skip passed over him, severely injuring the poor fellow about the neck and shoulders, and breaking the right "clavicula," or collar bone.

Shipley Colliery.—Joseph Rayner, the engineer on Shipley-field, whilst engaged on Tuesday afternoon, at work with other men, met with a sudden accident, owing to the breaking of some machinery, which caused instantaneous death.—*Daily Reporter.*

Pitlarrow Colliery.—On Monday week, an explosion of fire-damp took place at this colliery, the property of the North Abbey Coal Company, by which six men were dreadfully burnt. We understand that they are in a fair way of recovery.—*Scotsman Herald.*

ASTURIAN MINING COMPANY.

A special meeting of shareholders in this company was held at the offices, Astoria, on Tuesday last, the 11th inst.

JOHN KILL, Esq., in the chair.

Mr. McKENZIE (the secretary) read the advertisement convening the meeting, which was for the purpose of enabling the registered proprietors of shares to make application to the Spanish Government for the Royal authorisation required to be obtained, pursuant to the provisions of a law recently enacted in the kingdom of Spain, affecting mercantile share companies; he also read a circular letter to the same effect, addressed to the unregistered shareholders.

The CHAIRMAN explained, that this was a special meeting, called in consequence of a new law passed in Spain, relative to mercantile joint-stock companies; he called on Mr. De Pinna, the notary for Spanish affairs in this kingdom, who had been instructed to prepare the requisite Spanish and English notarial acts, and amongst them the authority required to be signed by the proprietors, to explain the law on the subject.

Mr. DE PINNA then explained that this law passed the Legislature on the 28th January last; its character was twofold, as affecting companies about being established, and those already established. It enacted that those companies at present in existence, without Royal authority, should petition for the same, showing their notarial acts and regulations, and other official documents. That, within a certain period after the passing of the act, a general meeting should be called by the directors to take the sense of the proprietors as to whether such Royal authorisation should be petitioned for—and in case of such course being neglected, the company would be considered dissolved, and their affairs should be wound up.

In answer to a question from a proprietor, as to the necessity of such a law, and was there any advantage to be derived from such Royal authorisation, Mr. DE PINNA said he believed there was great irregularity in the administration of the affairs of joint-stock companies in Spain, and the intentions of the Government were by this law to assimilate them—it was similar to a Royal Charter in England.

The CHAIRMAN said, they had expected such questions, and had, therefore, taken the opinion of Mr. Amory, their solicitor, who was himself a shareholder, and would, doubtless, explain that opinion to the meeting.—Mr. Amory said that he held 60 unregistered shares, and he felt no hesitation in signing—it could not involve the shareholders in any difficulties in this country, and if they did not sign they must wind up.—Mr. DE PINNA said, even under the worst circumstances, there could be no responsibility, as by the Spanish law it must come against person or property; and he apprehended few of them had any property in Spain, and while here their persons were safe.

After some further conversation, the individuals present proceeded to sign the necessary documents; and the following resolution was passed, "That an application be made to the Spanish Government, in accordance with the law affecting mercantile joint-stock companies, for obtaining the Royal authorisation to the Asturian Mining Company, in the terms now submitted to the meeting."—The meeting was numerously attended.

ANTIMONY AND SILVER-LEAD MINES.

At a meeting of this company, held at their offices, 58, Lombard-street—Capt. F. J. BELLER, H.E.I.C.S., in the chair—the minutes of the last meeting were read and confirmed.—The secretary produced the report of D. T. Ansted, Esq., Professor of Geology at the King's College, who had been sent expressly to report on the minerals in the sett. On handing the report to the chairman, the SECRETARY stated, he had had two personal interviews with the learned professor, at which he had stated—"that he entertained the greatest confidence in the success of this undertaking. That the mine at the present moment (although only in her infancy) would pay all her expenses, and leave a profit. That there could be no question that, by a moderate outlay, large and lasting returns of antimony and silver-lead ore might be expected from this sett." There had been already numerous applications from the country, and more particularly Cornwall, for shares; and, in the course of a few weeks, it might reasonably be anticipated the present list would be completed, and the whole capital of the company subscribed. It was true that, at the present time, there was a great depression in the money market; but he trusted, as the summer advanced, affairs would take a more favourable turn, and mining resume its usual briskness. It must be recollected that mining was not only becoming fashionable but profitable—so much so, that even Prince Albert had embarked part of his capital in mining undertakings in Cornwall, under the able superintendence of Mr. John Taylor. As regards profits, it was well known that where capital, embarked in mining undertakings, had been judiciously laid out, the return had been, at least, tenfold; and, when they took up the *Mining Journal*, and compared the home mines with the foreign ones, it would be found that the difference in favour of the home mines was upwards of 100 per cent. It was not unusual for Cornish mines to pay regular dividends of from 25 to 40 per cent., and, in some cases, even more. After looking at the encouraging report received from Prof. Ansted, the shareholders of this undertaking had every reason to expect a successful issue; and that the day would not be far distant, when the Antimony and Silver-Lead Mines of St. Kew would stand prominent among the dividend-paying mines of the country.

The CHAIRMAN having read the report of Prof. Ansted, moved that it be printed, and circulated among the shareholders, which was carried unanimously. It was further resolved, that the pursuer be instructed to put on the mine an additional number of miners, to prosecute the works with vigour.

Report of Professor D. T. ANSTED, M.A., F.R.S., Professor of Geology at King's College, London; and Consulting Mining Engineer.

In conformity with your request, expressed in your letter of the 25th March, I have to state that I have visited the mines and mining property there referred to, consisting of an antimony mine lately opened, and some workings for lead, both in the neighbourhood of Tregear and Trevelgan, in the parish of St. Kew, Cornwall. I have now the honour to report to you the result of this visit. The mining ground, or "country," in this sett, consists chiefly of two kinds of killas, or slaty rock—one kind blue, hard, and partly crystalline, the other pale yellow, coarse and softer texture, and quite unfit for use as a building stone. Besides these rocks, there are also several other varieties of phyllitic rock, running east and west; the general dip or inclination of the slaty rock to the horizon is towards the west and south, and the direction of the principal lodes or mineral veins is north and south, with a prevailing underlay to the west. The surface is broken and hilly—the direction of the principal valley being to the south, so that the main lode crops out, and is conveniently laid bare by coasting on the left or eastern slope of the hills, enclosing this small valley. The principal lode is that containing lead ores, probably rich for silver, and the antimony occurs chiefly, if not entirely, in one gully on the opposite side of the valley near the hill-top. Before proceeding to describe the mines and mineral prospects of the sett, it will be worth while to refer to a sermon to the district generally. Within the compass of a very few square miles, there is here abundant evidence of mineral riches, the chief metals found being lead, silver, antimony, and zinc. Of these the lead and silver, in the form of argentiferous galena, and the zinc as blende, occur in the same north and south lodes, while the antimony is usually in bunches or pockets, and is not associated with other metals; the former ones are said to occur chiefly in the bluish, and the latter in the whiter varieties of killas. The antimony mines are extensively and very profitably worked at Trebeurton, but has also been found elsewhere in the neighbourhood, and especially in the Wheal Sarah Mine—it appears to be remarkably rich for silver. The lodes are strong, very uniform, and continuous in direction, and offer no practical difficulties in working. The district in the neighbourhood of Tregear is one of the best known in Cornwall for the grey ore, or sulphuret of antimony. This ore has been worked at intervals for nearly a century, near St. Minver and Endellion, and at other places, usually in rich and pure bunches or pockets. The Antimony Mine, at Trebeurton, and the latter in the whiter varieties of killas. The antimony is on the upper part of the hill, on the west or right bank of the little valley already alluded to, and near the head of the valley. The present workings consist of a kind of open working or pit, whose depth is about 3 fms., and which branches out into one or two small drifts at the bottom. The sinking has been very irregular, in consequence of the ore being widely and abundantly distributed in several leaders or branches, each of which is of tolerably large size, and which all seem to have a tendency to converge downwards, towards the south, but which the latter is by no means clear. The ore, as it is exposed, is in the form of bunches of ore, towards which these conduct, appear to be at no great distance. There is every indication of its being of large dimensions; the quality of the ore already raised is excellent, and the quantity large (its value greatly exceeding the expense of raising); the country is soft, and easily and cheaply mined, and an adit might be driven to drain the mine to a moderate depth at very small expense. Until the lode or bunch is found, the ore raised from the leaders will more than pay the expenses of the mine. Little more seems required than a small outlay of capital to start the mine, and if required, to drain the upper workings, by a short adit, the returns would probably be almost immediate, and there is every prospect of their being considerable. The indications of silver-lead ore (argentiferous galena) in this sett are not less certain or satisfactory than those of antimony, but less has been done at present to show their value. There are here indications of two lead lodes, one of them the continuation northwards of that worked in the Wheal Sarah; and the other ranging a little to the east, and bearing apparently in a somewhat westerly direction, so as to fall in with the other (of which it is perhaps a branch) about half a mile to the north, and not far from Mid Hendra. The Wheal Sarah lode has been proved by coasting in several spots south of the sett I examined, and is throughout very promising, although there is somewhat disturbed by elvans. The specimens brought to grass, both from the costeanings and the deeper workings, at a spot where an engine is now being erected, and where it is proposed to work the mine vigorously, show a very excellent specimen; and those also which were shown me as obtained from costeanings in the north are similar in character, but perhaps are not so promising. The lode thus well marked in the Wheal Sarah sett, and shown in its continuation northwards at two or three points, was laid bare during my visit at Lower Trevelgan, and partly worked by the old men—an adit having been commenced near the Wheal Sarah boundary, but the sett belonging to you. It is probable, that by continuing this a little further to the east, the second or east lode would be reached. I have already stated my opinion, that it will prove to be a branch of the main lode, running in a little south of Mid Hendra; should my view be correct, the lode may be expected to be the richest for silver in this part, and I think there are other reasons why such should be the case; for, in the first place, the country is here comparatively free from elvans; and, in the next place, the portion of the lode corresponds in position with the richest and most valuable portion of the Trebeurton lode, which has proved so profitable. It is not unimportant to remember also that, in consequence of the position of the sett in the upper part of the valley, and the extent of workings already undertaken in the Wheal Sarah, this latter mine will both prove the lode, and drain the southern portion of the sett. In order to establish important lead mines in this property, it will be necessary to sink with care, and to some extent, at moderate distance apart, and it will also be advisable to prove the two lodes at some little depth, to determine their real underlay, both in direction and amount. It will then be possible to select the spot which is best adapted for extensive workings, and sink them steadily to cut the lode, at a moderate depth. A certain amount both of time and money are, of course, required to complete such operations; but I think there is every good reason for expecting a highly favourable result, since

there seems every reasonable ground for expecting a rich and valuable lode at moderate depths. I consider, indeed, that both with regard to the antimony and silver-lead, the sett is very admirably placed, and that with a moderate capital, and some little patience, it would prove a very profitable addition to the country and mining operations, and carry them on with greatly increased vigour.—G. Oakes & Co., Hyd. Park.

THE GOVERNOR AND COMPANY OF COPPER MINERS IN ENGLAND.

INCORPORATED BY ROYAL CHARTER.

A numerous meeting of proprietors of the above company was held, at Radley's Hotel, Bridge-street, Blackfriars, on Saturday last, for the following purposes:—

The DEPUTY-GOVERNOR (G. H. Pelly, Esq.) took the chair, and called on the secretary to read the advertisement which convened the meeting.

The SECRETARY (Mr. Younger) read the same. The CHAIRMAN then read the following report:—

In consequence of the distressed state of the company's affairs, many conferences have been held between the court of assistants and all parties interested in the company's welfare, whether as shareholders or debenture holders; that the court of assistants were thus now to pursue their usual course, would only have to repeat what is unfortunately too well known, probably to every one present. Two committees have been diligently sitting for many weeks past—the one nominated by the general court of proprietors, and the other by the debenture holders—to investigate the affairs. The court of assistants, therefore, feel themselves, in a manner, relieved from the task of further detail. In consequence of the resistance of our colliers, and the workmen in some other departments, to the necessary reduction of wages consequent on the extreme depression of trade, seven blasts had to be blown out, and the operations of the manufacturing works had to be suspended for several weeks. This has caused a falling off in the quantities manufactured, with the exception of iron. In consequence of one of the proprietors, Mr. W. H. Lord, on the part of himself and other proprietors, having filed a bill in Chancery, it has caused a suspension of the proposed trust deed—(hear)—in consequence of these proceedings, the governor, deputy-governor, and court of assistants, have thought it right to offer themselves for reelection for the ensuing year; but as soon as, by any arrangement, the reorganisation of the company can be perfected, the members will be quite prepared to make way, by resignation, for such parties as may be chosen by the newly-modelled body. The court would recommend to this meeting the appointment of two committees—consisting of three from the original shareholders, and three from the preferential shareholders—to confer with the debenture holders upon an amalgamation of interests, to serve as a basis upon which fresh capital may be raised.

Mr. SCOTLAND asked if the proprietors had investigated the affairs of the company? The CHAIRMAN replied, yes, and that he had understood a report would be presented to the meeting.—Mr. J. H. GOODHART, one of the committee of investigation, rose, and placed their report in the hands of the chairman.

Mr. J. W. CARDEN desired to know if the directors had prepared a balance-sheet? The CHAIRMAN replied, no, as they considered that was the duty of the committee. Mr. CARDEN said, he had always been accustomed to receive one from the hands of the board of directors.

Mr. SCOTLAND, the solicitor of the company, wished to draw the attention of the meeting to its main object—that of electing a governor, deputy-governor, and court of assistants—for if that was neglected they would forfeit their charter. (Hear.)

Mr. INGLES, Mr. FLEIGHT, and others, complained of the want of a balance-sheet. The CHAIRMAN now called upon the SECRETARY, who read the report of the committee, which put forth a very unfavourable statement of the future prospects of the company, and passed some severe strictures on the conduct of the directors.

Mr. LORD moved, that it be printed, and circulated among the proprietors.

Mr. CUMMINGS (a director) thought it was usual, when a reflection was passed on any body of men, they should be placed in the situation to explain, or repel it, before it was printed and circulated; but, on this occasion, the report had not been heard of, by any one of the board, until the meeting had just heard it read. (Hear.) The members of the board had character to be of some value to men, and ought not to be trifled with; they, therefore, claimed the right of replying to those charges before they were circulated to the world. (Hear.)

Mr. SCOTLAND, one of the committee, stated, it had not been in their power to present them with a copy, as the report had only been completed that morning. He said, the delay arose from the difficulty they had in obtaining papers from the office of the company.

Mr. SCOTLAND said, he was not interested in the company as a shareholder, but as its adviser he addressed the meeting. He said, he understood proceedings were going on, or threatened, that might have for their object to fix every shareholder as debtor to the creditors of the company—(hear)—so that they might become liable in their individual capacity; and, therefore, whatever threats might be held out by the debenture holders, they ought not to regard them as their personal creditors. He said, it was his duty to inform them, if they violated their charter, they might prejudice themselves, and close the protection which was afforded to them by the charter: he thought they had not acted right towards the gentlemen who formed the executive, by condemning them without first hearing them in reply to the charges. It was not the usual spirit of English gentlemen to act thus towards each other. He (Mr. S.) had much intercourse with those gentlemen in the course of this business, and he had always received the greatest courtesy at their hands. He said, he must reply to one paragraph in the report, which stated, they could not have made their property liable to the Bank of England. He (Mr. S.) would only say, the bank was ready to afford them every accommodation, and to extend the period for repayment of the sum they had borrowed. They have said, they will act with every consideration towards the company, if the proprietors did not quarrel among themselves; but if they broke up the establishment, they would feel bound to take possession of the property. (Hear.) He had also been informed of this by their solicitor, and he could assure the meeting it was not an idle threat. The solicitor of one of the lessors of the works was in the house, and was ready to inform the meeting, that every indulgence would be extended to them by the gentlemen he represented; but if they quarrelled among themselves, he would take possession of the property. The deed of trust had been prepared for the general benefit of the proprietors; the draft had been sent to the solicitor of the bank for its approval, and it would soon be ready. They were aware a bill in equity had been filed against the company, with 69 interrogatories; and, if proceeded with, some time must elapse before the answers could be put in, and a corresponding period for a final settlement.

Mr. EXTON (a director) defended himself from the charge made against him in the report, which he said was untrue.

After some conversation on the propriety of printing the report of the committee, in which several gentlemen took part, it was admitted justice would not be done to the directors until their reply was given to those charges—the resolution was, therefore, withdrawn. A request was then made, that they should be allowed to adjourn for half an hour.—Capt. MOORE (a director) thought the proprietors were wanting in courtesy to request the directors to retire, while they were together how they should act to turn their board out. (Hear.)—Mr. CARDEN still urged the adjournment for half an hour.

Mr. SCOTLAND said, he was satisfied Mr. Carden was not aware of the injury that the company would sustain if it were insisted on—it would involve the forfeiture of their charter. (Hear.)—It was at last assented to, that the shareholders should be allowed to retire to the next room for half an hour.

The CHAIRMAN said, they were ready to resign their office of directors as soon as they could see the company resuscitated.—Mr. CUMMINGS also assented to this.—Scrutinisers having been appointed, the meeting adjourned for half an hour.

Mr. FLEIGHT, with some warmth, condemned it; he called it packing the meeting.—Mr. LORD VIGORS replied, it was no uncommon thing for parties, who could not attend the meeting, to send their proxy to one of the court. (Hear.)

Mr. CARDEN presented a proxy from Mr. Wix, in which the names had been erased, to know if it could be used?—Mr. SCOTLAND replied, it could not; and took the opportunity of retorting upon this party for having adopted the very course they had condemned in the directors' report, when they were in the majority. (Hear.)

Mr. SCOTLAND observed, he had, in conjunction with his friends, filed the bill with the view of benefiting all parties; they wanted to create one common interest—and when that was accomplished by a mutual understanding, the law proceedings might soon be settled. (Hear.) He wished them to share seat and lot together.

Mr. SCOTLAND was sure there was not a gentleman in the room who could be opposed to such an arrangement.

Mr. CUMMINGS was happy to see a disposition to come to some friendly arrangement. It would be the salvation of their property, and the only way to save the company.

The CHAIRMAN said, he could assure the meeting, directly such an arrangement were come to, the present board would willingly retire.—(The hour for closing the ballot having arrived, the scrutinisers retired to take the numbers. Here a long, desultory, and unsatisfactory conversation took place, with an endeavour to bring about a reconciliation with the three conflicting interests—the preference shareholders, the old shareholders, and the debenture holders—but to no effect.) After which, Mr. FLEIGHT, with some warmth, condemned it; he called it packing the meeting.—Mr. LORD VIGORS replied, it was no uncommon thing for parties, who could not attend the meeting, to send their proxy to one of the court. (Hear.)

Mr. CARDEN felt deep regret to be compelled to second the resolution. It had been a source of pleasure to him to move a vote of thanks to various boards of directors; but he had never before been pained by the necessity of supporting a vote of censure on any body of gentlemen. He felt great sorrow on the present occasion, as he had been so long connected with the company, and as he had been so long a member of the court, and he regretted they should be found in such company. (Hear.)

Mr. CUMMINGS thought the forming of a house list, for the purpose of supporting the interest of the company, did not deserve such a censure.—Mr. CARDEN replied, he did not support it on that account, but for the past mismanagement of their affairs. (Hear.)

Mr. FLEIGHT then put the resolution to the meeting, which consisted of about 50 persons, besides the directors. Twelve hands were held up in its favour; the rest taking no part in voting for, or opposing it, it was, therefore, virtually carried.

Mr. FLEIGHT thought, after such a vote, they had no alternative in settling their affairs but by going to the Court of Bankruptcy.—Mr. INGLES moved, that the committee continue its functions, which was seconded and carried.

Mr. GILBERTSON was sorry to see the meeting likely to separate without coming to any particular result. He condemned the acts of the directors, though he did not support the vote of censure upon them. He knew a great number of individuals, servants of the company, who had grown grey-headed in their employ; and if the property was to be abandoned, the company would be thrown out of bread.—(Hear.)—and this evil would be still further increased, by throwing out of employ between 8000 to 10,000 men. He (Mr. G.) on the part of his brother and himself, represented 8000 of capital in the company; and, great as already would be the sacrifice, they would make every effort to endeavour to sustain these men in employment. (Hear.) He held the property at Cwm Abbey to be most valuable, and worthy of being sustained—not that it would pay a dividend of 5 per cent. upon the exhausted capital, but it offered good remuneration to any man who would take the trouble to make it so, and would make a further risk to sustain the company. (Hear.) Let them, then, as Christians, endeavour to continue the works, and sustain these men who have claims upon them—fort to throw so large a number out of employment, at the present distressed state of trade, would be attended with the most disastrous consequences. (Hear, hear.) He would, therefore, move, that a committee of shareholders be appointed, to endeavour to carry out this view. He would urge upon the meeting the importance of these considerations, which, involved a deeper interest than their pecuniary loss.

The CHAIRMAN replied, it was what the court of assistants were most anxious to accomplish—the resuscitation of the company. (Hear.)

This appeal of Mr. GILBERTSON had a powerful effect upon the meeting, and, in consequence, Mr. CARDEN, the leader of the opposing party of shareholders, advanced to the chair, and said—I have here, Sir, a list of gentlemen whom we propose to you to form a committee to settle our differences, and, if possible, to devise some means by which we may raise the funds to carry on the works. (Hear.)

The following resolutions were then put to the meeting, and carried:—"That B. Cotton,

Esq., William Fowler, Esq., and William Gilbertson, Esq., be a committee to confer with the preference shareholders and debenture holders, with the view to resuscitate the company."—"That I. M. Carter, Esq., W. H. Lord, Esq., and Mr. A. Shaw, Esq., be a committee to confer with the old shareholders and debenture holders, with the view to resuscitate the company."—"The scrutineers then declared the whole of the late board to have been re-elected.—The meeting then separated.

PENNANT LEAD AND COPPER MINING COMPANY.

A special meeting of this company was held at 68, Cheap-side, on Thursday, to receive a report from the directors on the proceedings of the mine; to obtain the sanction of the proprietors to negotiations now pending for amalgamation with other undertakings, as well as for leasing the timber, and working the mine by contract; to make a call, &c.

Mr. R. O. ALAND in the chair.

Mr. W. W. MANSELL (the pursuer) read the advertisement convening the meeting, and the report, which states that the directors have delayed as long as possible calling the shareholders together, in the expectation of being able to mention the completion of plans for the benefit of the company, which have been under their consideration. Several projects of amalgamation with other mining undertakings have been proposed, and there are one or two which would be particularly advantageous to the shareholders; but as a statement of details might interfere with such treatise, the directors feel assured the proprietors will leave the subject in their hands. With respect to works generally at the mines, the directors can state to the shareholders they progress steadily. Capt. Floyd, of the Tin Vale Mines, in whose practical judgment the directors have great reliance, who has recently visited Wales on other matters, expressed himself satisfied with the manner in which the works have been executed, and declares that the rates charged, both for the adit and shaft, have not been beyond fair wages for the men. He likewise recommends an adit being driven on the eastern side, about 20 fms. under Doubilay's adit, where he considers there is a probability of cutting a rich deposit of ore at a moderate outlay. The directors had hoped to have brought a considerable quantity of timber to market before this, but the incessant rains and protracted winter have rendered it impracticable. The fine weather has, however, been readily taken advantage of, and Mr. Hugh Jones is fast collecting it. The directors are in treaty with Mr. Richardson for working it, as well as the iron pyrites, of which there is a great quantity; and they fully expected that gentleman would have been present to state his views personally, but he is unfortunately detained in Cornwall. The directors can assure the shareholders that the utmost economy is exercised, and the duties of themselves, as well as the pursuer, continue to be gratuitous. The delay in assembling the shareholders has necessarily led to an advance of money in respect of the works, added to which they have had to make provision for the half-year's sleeping rent, due March 1. The directors, therefore, recommend a call of 4s. per share, which will be sufficient to cancel the deficit, and provide means for further working. The directors had intended to suggest amendments in, and additions to, the provisions of the cost-book; but, as the carrying out of any plan of amalgamation would entail the necessity of a new cost-book being formed and signed, the alterations can then be made. The abstract of accounts which was laid upon the table showed that the amount received from the call of 6s. per share, amounting to about 18000, had been expended in the working of the mine, in addition to a further sum of about 4500, which stood to the deficit account.

The CHAIRMAN said that, the report having been read, he begged to move that it be received and entered on the cost-book. He regretted that a death in the family of the chairman prevented his being present on that occasion, and the duty, therefore, devolved upon him of making a few observations. He regretted that the results which they expected last year had not yet been obtained, though he should have been glad if he could have stated they had. Certainly no term had been reached that which was generally applied to the shareholders in mining companies (viz. a dividend) could be better applied; for it was an adventure where, however favourable appearances might be, it was impossible to tell with certainty when they could obtain a return for their outlay and labour. They had been progressing with their works, and must now, of course, be so much nearer the ore. The works were in a satisfactory condition, and Capt. Jones told him would be ultimately of great value. With regard to the manner in which the work was done, they had recently had the opinion of a gentleman who they placed the most perfect confidence in (Capt. Floyd), to the effect that the money had been well laid out, and that when they arrived at the result of making a return, no extra expenditure would be required on the works. (Hear.) When they took into consideration, then, how difficult it was for gentlemen in London to manage mines situated in Wales—to get at which, not only involved an expenditure of money, but an expenditure of time, so that they could not have the surveillance of them as they could over similar undertakings in a more convenient locality—that report he was sure would be deemed satisfactory. Perhaps, now, some gentleman might be inclined to blame them for having expended so much money in the first instance; and, though it was not thought so at the time, he was not prepared to admit, that a great deal had been laid out on the mine; but if they succeeded, too much credit could not be given to an individual who had the spirit to lay out a considerable sum of his own money before he was associated with that company, in constructing good roads and approaches to the mine, though, till they did succeed, a feeling would probably prevail, that they had laid out too much on externals. With regard to the present condition of the company, they would see that they were rather in debt, but the directors had considered it unnecessary to call them together every time they wanted 1000; but, knowing the confidence they had hitherto placed in the directors, they had subscribed what was wanted from their pockets, and delayed calling the shareholders together sooner, being daily and hourly in expectation of being able to tell them something decisive, with respect to the position of the mine, as they had been led to expect by their captain (Mr. Hugh Jones); but mines were so subject to the breaking in of water, and a number of other unforeseen circumstances, as to defy calculation. With respect to the lease, that was ready to sign, and he believed there would be no difficulty in the matter, though some observations had been thrown out by a party that they had no right to proceed without it. He might mention, that if they could succeed in carrying out arrangements now in progress, not only would they be enabled to meet them next year with a full return of the money laid out on Pennant, but that there would be a good bonus to receive. He should be happy to answer any questions relative to the mine; but, with regard to the amalgamation, he begged to suggest that it would not be prudent to ask too many on that subject, the negotiations not being concluded, but the shareholders might rest assured that the directors were only actuated by one motive—viz., to do the best they could for themselves, while they wished it to be understood by the shareholders that they could have the lease at any hour they pleased, and their taking it depended upon when they might think it most advantageous to the shareholders to do so. The directors knew the pliable nature of the gentleman to whom they were opposed, and they did not think the shareholders at all prejudiced, but rather advantaged, in not having the lease at present. (Hear, hear.) With regard to amalgamations, they knew that at present they had no return for their outlay, while they had had offers of amalgamation from several other mines, some of which were productive. One or two of these offers were before them, and he had no hesitation in saying that, if they could succeed in carrying out arrangements now in progress, not only would they be enabled to meet them next year with a full return of the money laid out on Pennant, but that there would be a good bonus to receive. 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The CHAIRMAN said that the next motion he had to make was far from an agreeable one; it was, that a call of 4s. per part or share be made payable on or before Monday, the 1st of May.—Mr. SCOTT seconded the motion.

The CHAIRMAN said, that before putting the motion he would ask Mr. Hugh Jones (captain of the mine) to explain his position.

Capt. JONES said, that on the east side of the mine, they had set down the adit 40 fms. on the course of the lode, and had a good quantity of iron pyrites on the hill. He had obtained two large tanks, and had agreed for them being filled up at 2s. each, he having no doubt that they would hold 10 tons each. As to timber, he could speak to the quantity, but could not profess to do so as to the value; it was up to the surface, and they had from 50 to 60 or 100 tons. In respect to the Doubilay's adit, it was cut 40 fms., being about 10 fms. from where every practical man considered there would be a good deposit of ore, the appearances being very favourable. On the western side, the adit was cut 20 fms. towards the lode, and the lode was sunk 20 fms. and 5 fms. more would bring it to the adit. There had been lately a great change in the position of the lode, which were sinking, rock having given way to rich killas, containing lime, which was a very favourable appearance; and, if they cut the lode, he had no doubt it would produce a good quantity of ore, as it was found not to underlay so much as was expected, which was a good indication of its making a good return.

In answer to questions, Capt. JONES stated that the sinking the shaft had cost 150 per fm., but it now only cost 90 per fm. for driving the adits had never exceeded 20 per fm., but generally it had averaged about 20 per fm. The cost of the adit was 150 per fm., and the lode of which run into the Pennant, produced 25 cwt. of silver per ton, and 72 per cent. of lead, being an unusually good mine. The lode was 2 ft. wide, and turned out 1 ton of ore per fm. The Cowick, another adjoining mine, was constantly sending ore to market.—Mr. STEADMAN having asked, if the price paid per fm. for sinking the shaft was not very heavy?

The CHAIRMAN said, that the directors had thought so; but they were now convinced, from report of Capt. Floyd, that the ground through which they passed, the work could not have been done better or cheaper.

Mr. SCOTT explained, that the great benefit expected from amalgamation was, that by having but one management for two or three concerns a better return might be fairly expected. A short conversation took place relative to the lease, from which it appeared that the landlord, who was to have a rent of 2000, guaranteed him until he was paid more by royalty on the working, claimed to have the royalty on the timber, independently of the 2000, on the ground, that at the time of leasing the mine he did not know of its existence. Mr. MANSELL explained, that one of the contracting powers was a stipulation that they having specifically agreed that they should be entitled to everything found in the mine, with the exception of time, and they were prepared to hold the shareholders against all law expenses upon the subject.

The motion for the call was then put and agreed to.

Mr. MITCHELL moved, "That the utmost confidence is felt by the shareholders in the discretion and judgment of the directors. That they be, and are hereby, authorised to complete terms for an amalgamation with any other undertaking which is now productive, and sending ore to market, and to make a further call, if necessary, for carrying the same into effect, by giving one month's clear notice."

In answer to a question.—The CHAIRMAN stated that he had no hesitation in saying that, if they succeeded in carrying out the negotiations, they would be able to get a good return for their outlay; it was uncertain how long it might be before the Pennant made a return, but that it was deemed a good mine was proved by the fact of other parties with mines making a return offering to unite with them. What they then asked from the shareholders, was power to treat with other companies, and when the arrangements were brought before them for their sanction, he had no doubt they would be all fully satisfied with them.

Mr. C. SMITH thought it would be better, before asking them to sanction an amalgamation, that the directors should be prepared to submit to them an offer of terms.

The CHAIRMAN said it might be more satisfactory, but there were difficulties in the way of such a direct offer, which he could not lay before the meeting at present.

Mr. MANSELL explained, that one of the contracting powers was a stipulation that their names, or the proposed terms, should not be mentioned until the directors of that company had power to treat upon the subject.

The CHAIRMAN suggested, that Mr. Smith, then whom no one was better versed in such negotiations, should join him (the chairman) in carrying those proposed.

Mr. MANSELL, who stated that he intended as the representative of the holders of 300 shares, opposed the motion, on the ground, that, though they were willing to stand the risk of law on their Pennant shares, they were not willing to enter into any other stipulations. He wished to know how an arrangement of an amalgamation could be made, if the company had power to treat upon the subject.

Mr. SCOTT said, that he had already explained that point. Of course it was by way of action.

In answer to a question.—The CHAIRMAN said, that he was convinced that the proposed arrangements would be beneficial, and so greater call would be required to carry them out, than would otherwise be expended on Pennant alone in the same time. He

could not publicly mention terms, but if Mr. Charles Smith would retire with him for a few minutes, he had no doubt of putting him in possession of such facts confidentially as would satisfy him and his friends of the propriety of the course the directors proposed to pursue.

The Chairman, Mr. Smith, and Mr. Mansell, then retired, and were absent about five minutes. On their return, Mr. Smith said, that he had heard a statement from the chairman, which convinced him that he should be right in according to the motion, and putting their confidence in the directors. (Cheers.)

Mr. Mansell said, that he felt bound, by his instructions, to move, as an amendment to the motion before them, that no amalgamation should take place.

The amendment not being seconded, the original motion was put, and carried unanimously.

The election of Captain Rose, as a director, in the room of Mr. Pofford, resigned, was confirmed; Mr. Charles Smith appointed as auditor, and thanks given to the chairman and directors for the way in which they had managed the affairs of the company.

The Chairman acknowledged the compliment, and proposed that a vote of thanks be given to the purser (Mr. Mansell). That gentleman devoted himself to their service day and night; and, if attention could have been secured, they would be sure to have had it.

The motion was carried unanimously, and acknowledged by Mr. Mansell.

Thanks were then voted to the solicitors (Messrs. Pocock and Marton), and to the captain of the mine (Mr. Hugh Jones), for the way in which they have performed their duties; and Mr. Charles Smith having been requested to assist the directors in carrying out the contemplated amalgamation, thanks were voted to the chairman, and the meeting separated.

CONDURROW MINING COMPANY.

At a meeting of adventurers, held at the mine, on the 11th inst., the accounts were examined and passed, showing—Balance due purser to end of March, 1867, 9s. 8d.; 1867, 17s. 9d.; 1868, 7s. 6d.—By labour cost Feb. and March, 67s. 15s.; bills, 248l. 17s. 6d.; 1-20th debts, 59l. 17s. 11d.; leaving balance against the adventurers, 115l. 17s.—It was resolved, that the next meeting of adventurers be held on the second Tuesday in June.—The following report, from Capt. Nicholas Vivian, the purser and manager, was read:—

The pump-shaft is in course of sinking under the 60 ft. level, and may be sunk to a 70 ft. level in about three months; the lode therein is 5 ft. wide, promising, and yielding a small quantity of tin. The 60 ft. level, on a counter lode, is very productive of tin; it is suspended until a winze, which is in course of sinking below the 50, and rising against the 60, is holed; a fortnight may be required for this purpose, when a pitch in the back of the 60, and two pitches in the bottom of the 50, will be set on tribute. The 60 ft. level is a very promising level, with a good course of tin. In the 50 ft. level, a promising lode, productive of tin. In the 40 ft. level, a promising lode, but poor. In the winze, sinking under the 30, on Llandover lode, the lode is large and promising, yielding 4 tons of copper ore per ft. The 30 ft. level, the 10 east and west, and deep adit end, west on Llandover lode, are all in course of driving, but at present the ends are poor. In the back of the 30, east of Pryce's, on Llandover lode, there is a good course of ore, working at 5s. in 1 ft. tribute. The back and bottom of the 10, on this lode, are also working on tribute at 10s. in 1 ft. The back of the deep adit, on Llandover lode, is working at 5s. in 1 ft. The back and bottom of the 30, on Llandover, is working in three pitches, two of them at 10s. in 1 ft., and the third at 11s. in 1 ft. The winze, sinking under deep adit, on Llandover lode, is yielding 2 tons of ore per ft. We have now a greater number of tributaries engaged than we have had at any former period, but the miserably low standard of copper and tin is grievously against us; were those metals at a fair price we could make some profit. The principal adventurers, in accordance with my own views and those of the underground agents, having suggested an increase of tinwork, we have, since the meeting held here on the 8th of February, increased our tinwork by driving the 60 ft. level of Pryce's (in which we have made an apparently valuable discovery), by rising in the back of the 50, and hoisting to the 40 ft. level, thereby ventilating these levels, and enabling us to work on tribute ground, and by sinking a winze under the 30, on Llandover lode; these, with some indispensable erections at the surface, account for our not liquidating the debt on the book.

MARKE VALLEY MINING COMPANY.

The annual general meeting was held at the White Hart Hotel, Salisbury, on Thursday last, W. FAWCETT, Esq., in the chair.

When the following report of the directors was read:—

The directors beg to submit to the proprietors the following report of the underground workings since they were called together in December last:—Marke's lode, in the 80 ft. level, has been driven on an average of 20 ft. in the 80 ft. level, and composed principally of fluor spar, manganite, and a small quantity of copper ore. In February this end was suspended, and a driving north, to cut Sarum lode, was commenced. The ground being very hard, this cross-cut has been extended 3 fms. 5 ft. only; however, a favourable change may be expected very shortly, as there was fair ground at this point in the 65 ft. level; in the same level, Marke's lode has been driven on west 19 fms. 2 ft. 9 in.; the lode has been tender and easy for driving, and about 18 ft. wide, composed of soft spar, prisms, and manganite, with good stores of rich copper ore—some portions being of very fine quality. At present, the lode is a flatter grade, and is not so easy for driving. There is a cross-cut about 10 fms. before the end; and the manager calculates that it will take about three months to reach it, and at which point he anticipates the lode will become productive. Sarum lode, in the 65 ft. level, has been extended east 7 fms. 4 ft. 7 in.—making, with what was before driven, 18 fms., on a course of ore that has produced 22 tons of ore per fathom for the entire distance; the lode in the present end is 18 ft. wide, and will yield 15 tons of ore per fathom. Feuron's winze has been sunk 6 fms. 1 ft. 10 in., and is holed to the 65 ft. level; that portion of the lode which has produced 8 tons of ore per fathom; the part of the lode still standing will yield 6 tons per fathom; the lode, therefore, is worth 14 tons per fathom; this winze (sunk from the 50 to the 65 ft. level) is on the course of the lode, and measuring about 30 fms.; midway levels, east and west, are now being driven; the lode, going east, is worth 10s. per ft.; going west it is worth 12s. per ft.; the stopes, in the back of the 65 ft. level, have produced 20 tons of ore per ft.; and the lode is now worth 60l. per ft. The pitches in the back of the 50 ft. level are suspended—not being remunerative at the present low standard. From the foregoing statement, the proprietors will perceive, that the Marke's lode, which was the only one that at any time was in a position to produce, and the manager reports, that the lode in the bottom of the 65 ft. level is better than at any part of the mine as yet seen; and he, therefore, feels confident that, when the cross-cut in the 80 shall have reached this ore ground, the lode will be found to be even more productive, and the ore to be of a much better quality. The cash account shows a balance of 454l. 7s. 9d. in favour of the company—out of which sum will be paid the cost-sheet for March, which may be estimated at 350l.; but the directors have now for sale 241 tons of ore, which, at the present low standard, may realise 6500l. The debt of 358l. 2s. 3d., due to the assignees of Messrs. Brodie, was paid off on the 3d of March last. In consequence of Feuron's winze having been communicated from the 50 to the 65 ft. levels, and midway levels having been commenced therefrom, east and west on the course of the lode—thus enabling the backs to be stooped with much greater facility, and at less cost—the proprietors may reasonably calculate upon the workings for the current year producing increased and profitable returns; and, when the Sarum lode is intersected in the 60 ft. level, the directors anticipate they will be in a position to declare a dividend.

ST. JOHN DEL REY MINING COMPANY.

A special general adjourned meeting of shareholders in this company, was held yesterday, at the London Tavern, Bishopsgate-street, for the purpose of electing a director, in the room of Stuart Donaldson, Esq., resigned.

J. D. POWLES, Esq., in the chair.

Mr. ROUTH then read the notice convening the meeting; when the CHAIRMAN observed, that since the notice had been inserted, they had received two letters, from gentlemen who had proposed themselves as candidates for the office—one from Mr. Illingworth, of Connaught-square, the other from Mr. C. Herring, jun., Cornhill.

Mr. SCHNEIDER, in moving that Mr. Illingworth be elected a director, said that he had known that gentleman for some years, and believed him to be most eminently calculated to fill the office of director to the St. John del Rey Company; he had been for years in South America, was well acquainted with mining, was an auditor of the company, and held 200 shares. He was pained in opposing their late manager Mr. Herring, as their fathers had been most intimate, and he felt much respect for the family; but he thought Mr. Illingworth much the better qualified of the two. Circumstances have arisen which makes it of the utmost importance for the meeting to be careful in their choice of a director—one who would act with unanimity with the board at home and the others abroad. Differences existed which would prevent Mr. Herring ever acting with cordiality, and he was sure his election would lead to anything but the well-being of the company. He alluded to the letters which have lately appeared in the Mining Journal, on the management in Brazil, and the treatment of the slaves; and although he believed the greatest part of the assertions to be incorrect, it was evident that they were written by some one intimately conversant with the affairs; and he thought the writer calling himself "A Shareholder," would have acted with much more candour, had he laid his knowledge and his complaints before the directors. He moved that Mr. Illingworth be elected.—Mr. MOCATTA seconded the motion.

Mr. BOWWORTH proposed Mr. Herring, and said the present prosperity of the mine was entirely due to him; and, from his long residence in Brazil, his extensive practice, and knowledge of the mines, his election as a director would confer the most solid advantages on the company. He explained any hostility or illwill towards Mr. Illingworth.

Mr. JACO seconded the motion. The CHAIRMAN said, some explanation was, of course, expected; and (any in that room expected there was, on the part of the directors, the slightest ill-feeling, or even the absence of the utmost respect towards Mr. Herring, whose abilities and high character they acknowledged, they were much deceived. There were, however, many circumstances which rendered that gentleman unfit to sit as a director at that board. The state of the company's affairs were never so prosperous; and if Mr. Keogh remained several years, they less—gold return more—the greatest unanimity existed among the officers and men—the negroes were happier, healthier, and the mortality less—less even than the average of England. Mr. Herring was in direct opposition to Mr. Keogh, and to their principal mining captain, whom, in all his despatches previous to leaving the mine, he had praised as being the most experienced miner in South America. It would lead to the ruin of their property, if the elements of discord were introduced, by the election of a director opposed to all the acts of the board, to the chief captain at the mine, to the heads of the negroes, and that of the reduction experiment.

Mr. HERRING rose for the purpose of explanation; he said, it was after his last letter that he discovered the practices of the principal captain, to which he had thought it his duty to call the attention of the board. He entered at length into the causes of the differences which existed; and the CHAIRMAN read the despatches of Mr. Keogh on the subject, which are too long for insertion—but which inclined the majority present to think that gentleman had acted in the best manner for the prosperity of the undertaking.—The meeting was afterwards most eloquently addressed by Dr. Gordon and Mr. Mallin, in favour of Mr. Illingworth, while they bore testimony to the character and talent of Mr. Herring, they were satisfied the election of the former alone could secure the unanimity of the board and the office abroad, which alone could advance the company's prosperity.

On the motion being put from the chair, the show of hands was 53 for Mr. Illingworth, and 13 for Mr. Herring.—Mr. JACO then demanded a poll; the result of which was, the election of Mr. Illingworth by a majority of 163 to 16.

The following is an extract from the superintendent's annual report for 1847:—"The year 1847 has been one of more than usual progress at Morro Velho, and will bear an advantageous comparison with the year 1846, or with any preceding year—whether considered with respect to the number and importance of great and expensive works undertaken and completed during the past year—or of other important works actually in progress, and which, when completed, as it is hoped they will be during the present year, are calculated to add considerably to the prosperity of the establishment—or whether viewed with regard to the increased production of gold, and consequent increased profits of the company—or whether, again, viewed with regard to the improvement in the man-

tary state, and in the material as well as moral comforts, of the negro labouring population."—A great number of most important works have been undertaken and concluded during the year 1847.

"During the whole of last year, a party was employed in taking levels and surveys of the country and water-courses for miles round Morro Velho, in order to ascertain from what point the required additional supply could be most advantageously brought home. Now, we only wait the returning dry season to commence this work.

"Turning to the results of the operations in the respective years 1846 and 1847, there appears in favour of the latter year an increase—

In the ore stamped, of 5299 tons = 15 17-100ths per cent.
In the gold produce, of 17,973 ota. = 11 79-100ths "
In the profit, of £6716 = 45 32-100ths "
And a decrease in the cost, of \$16,771 = 5 43-100ths "

It was, however, in the last 6 months of 1847, that the greatest improvement took place; and the comparison of that portion of the respective years 1846 and 1847 shows the following results in favour of the latter year—viz., an increase—

In ore stamped, of 3780 tons = 30 4-100ths per cent.
In gold produce, of .. 15,506 ota. = 20 57-100ths "
In the profit, of £5372 = 76 "

The various measures taken, in the course of the year just past, to preserve the health of the negroes, to protect them from insult or ill-treatment, and to add to their comfort, by allowing them the opportunity of earning the pecuniary means of comfort through over-time labour, while the effect of such over-time labour was vigilantly watched by the medical officer, lest it should become injurious to their health or strength, have all combined to improve their position, both morally and physically; they feel that they are treated with the consideration due to our fellow men. With the increase of their comforts, and of their means, they feel that they have something to live for besides their daily task. And I may venture to say, it would be difficult anywhere to find a better regulated, a more orderly, a more contented, or a happier set of beings, than the large body of (between 800 and 900) blacks now in the company's service.

The following comparative statement of the mortality among the blacks, for the last seven years, shows a result for the year 1847 highly creditable to the care and skill of the medical officer:—

Commencement of	Total No. of Blacks	Deaths	per cent.
1841	459	28	6 1-10 per cent.
1842	458	20	4 37-100 "
1843	459	25	5 "
1844	502	30	5 97-100 "
1845	506	27	4 78-100 "
1846	702	41	5 84-100 "
1847	847	22	2 6-10 "

Mr. Birt, in his annual medical report, very fairly observes:—"This is a very favourable document, not only as regards the comparison with those of former years, but also bears a comparison with any European statistics of mortality. In England the percentage, including the whole population, is not less than 3 per cent; or little more than 24 per cent." Hereafter the rainy season has been generally marked by heavy and extensive breakages of the regos, which supply the water required for working the machinery, and the repairing of such breakages necessarily involved a serious expenditure both of money and time.

During the present season, these breakages have not occurred, owing to the prudent precautionary measures adopted, in appointing a detached corps of 8 or 10 men during several months of the preceding dry season—say, from the end of June to the end of October—whose sole occupation it was to repair and strengthen the regos wherever they evinced any symptoms of weakness.

In conclusion, allow me to observe, that, with the mines in excellent working condition, an increasing extent of stopping ground, the pitwork of the three mines, as well as the pumping machinery, all new, powerful, and in perfect order, with measures now in progress for largely increasing our manual force, as well as our stamping-power, and with order and economy reigning in every department, I hope it is not too much to anticipate that the present year will be one of, at least, not less prosperity than that which has just expired."

TAVY CONSOLS MINING COMPANY.

A meeting of adventurers was held at the Central Hall, Plymouth, on Tuesday last, when the committee presented a report, in which they stated, that Capt. Lean, of Holmshush, whom they had employed to examine the mine, had a very high opinion of the undertaking; and from his expressed opinion to some members of the committee, and having sold since Christmas 1000l. worth of ore in it, they have great confidence that the mine will, in a few months, return a profit to the adventurers, and handsomely repay them for their perseverance and outlay.

The statement of accounts showed a balance from last account of 92l. 1s. 9d.; January cost, 214l. 8s. 11d.; February ditto, 224l. 14s. 8d.; dues to G. Strode, Esq., 56l. 4s. 4d.; merchants' bills, 120l. 10s. 9d. = 708l. 13s. 5d.—Balance down, 19l. 3s.; bill for January ore, 402l. 1s. 8d.; February ditto, 287l. 8s. 9d. = 708l. 13s. 5d.: 62 tons of ore, estimated value 300l., stands to credit of the mine.

The following report from Capt. W. Goss was read to the meeting:—

I beg to inform you, that since our last general meeting, the engine-shaft has been sunk about 3 fms. 2 ft. through good grey ground, producing, on an average, about 6 tons per ft. The lode in the bottom of the shaft is from 2 to 2½ ft. wide, with a leader of solid ore in the western end, about 1 ft. wide; and the shaft all over, in the country as well as in the lode, is beautifully bespangled with ore. The 36 ft. level has been driven west above 5 fms., through a lode from 7 to 8 ft. wide, of a very promising character, although at present poor, composed of manganite, peat, and prisms, with strong spots of yellow and black ore. (Since the last general meeting, the shaft and 36 ft. level have produced from 50 to 55 tons of ore.) The 24 ft. level, west of the cross-course, has been driven about 3 fms.—the lode about 4 ft. wide, composed of manganite, spar, and peat, with good stores of yellow ore, and, I think, as we get off from the cross-course, the lode will prove productive; in the 24 ft. level north, on the cross-course, we have driven about 4 fms.; here I fully expected to have cut the north copper lode, that was seen in the 12 ft. level, where it underlayed 24 ft. in a fm.; but whether it has become more perpendicular in its underlay, or else become so small as not to be noticed, I cannot as yet determine; but as there is a large store of ore coming from the end, I think it further north, and should recommend the end to be continued; the pitches are producing a fair quantity of ore, and working at tribute, from 1½ to 1½ in 1 ft.; the tributers pay all their expenses, and I believe I may say with confidence, the men are all getting wages, and that the whole of the ground yet driven through will be taken away at tribute. We sampled, at Gawton, 31st March, 62 tons of ore. The quantity would have been greater, but it has been dressed cleaner than usual—consequently, the sample is one and a half produce higher than before. We expect to sample about the same quantity for the present month.

WHEAL CALSTOCK MINING COMPANY.

A general meeting of adventurers was held, on the 4th instant, at Messrs. Tyth and Lucombe's offices, Plymouth, when the accounts were presented, showing—amount received on calls, 1162l. 10s.; by materials sold, 16l. 1s. 4d. = 1178l. 11s. 4d.—By mine cost to February 29, 1097l. 19s. 11d.—leaving balance against the mine, 80l. 11s. 5d.; the amount of calls remaining due being 61l. 18s. 6d., of which 30l. is owing by shareholders who are creditors to the company.—The statement of liabilities and assets shows—Due to various merchants, 167l. 9s. 6d.; by available assets, 80l. 11s. 5d.—leaving balance against the company, and to be provided for, 86l. 18s. 1d.—The following report, from Capt. W. B. Collom, was read to the meeting:—

Wheal Calstock, April 4.—Since the general meeting of the company, held in November last, our work in this mine has been principally confined to the driving the 30 ft. or shallow adit level further west, driving a cross-cut north from the end of the same level, clearing up and driving the 50 ft. or deep adit level west, and the commencing a new level, the 20 ft. level, at the level of the 30 ft. level, and the 20 ft. level, and the 20 ft. level, a distance of about 20 fms., and is west of Pawley's shaft 140 fms. This level has been driven with the intention of cutting several large lodes at their junction, which by reference to the underground plan of the mine now on the table, it will be seen four of those lodes will be met with in driving this level a few fathoms further on. At the surface, where two of these lodes have united, they form a lode more than 12 ft. wide, 6 or 7 ft. of it is gossan (specimens of which are before you)—one of these four lodes in fact is throwing out a very strong stain of copper from the western side of the cross-cut; the other three, however, are composed of manganite, spar, and peat, and the lode they unite. The cross-cut in the same level is driving north, with the intention of cutting several large lodes, which we have every reason to suppose are also together; these are the main lodes of the set, from one of these lodes several hundred tons of ore were returned, but the others have never been worked on—the cross-cut is driven towards them 8 fms.; the air in this level is very bad, from the great distance the workings are off from any shaft; this, for the time, prevents us from making that despatch we could wish to determine; but as there is a large store of ore coming from the end, I think it further north, and should recommend the end to be continued; the pitches are producing a fair quantity of ore, and working at tribute, from 1½ to 1½ in 1 ft.; the tributers pay all their expenses, and I now feel great pleasure in stating, that after clearing up 140 fms. of the level, letting down the water, and driving 30 fms. west, this level is now under the shaft which we shall commence raising against as soon as the new lode is cut through. The lode just named is one that was rather unexpectedly met with, about 9 ft. behind the present end of the 50 ft. level, and the north side of that level; it is a very large lode, underlaying south about 3 ft. in a fm.; after cutting through the capels, the men, on Saturday last, met with a leader of tin ore, from 1 to 1½ in size; judging from the small space mined, and the rich stores of tin taken out, it is likely to prove a very valuable discovery. Still further north of this leader of tin, the lode contains copper ore, but much cannot be said about this until more work has been done on the lode. The new shaft has been commenced, is sinking on the course of the copper lode, from which the old men made large returns; this shaft is sunk 4 fms. deep, and is intended to communicate with the deep adit, both for the purpose of ventilation and for bringing away the stuff broken. In the bottom of this shaft there is a most promising lode, containing copper ore, fluor-spar, and manganite—this is the next lode south of the tin lode. When necessary to be done towards proving the mine, is to communicate the new shaft as soon as possible to the deep adit, there being 26 fms. more to complete the same, which will cost about 1300l.; to continue on the 30 ft. level west, to the junction of the four south lodes, and the cross-cut north to intersect the main north lodes in this level—to carry out this work will employ 18 men, the monthly wages of whom will be about 500l. per month. From the favourable position of the mine, it has hitherto enabled us to carry on our workings effectually, to try the mine at the cost alone of what it would take to maintain a steam-engine to keep the mine dry to the depth we now are. The money expended to the end of February, 1848, as per cost-book, is 1097l. 19s. 11d., whilst our liabilities amount to 167l. 9s. 6d., against which are assets for calls and other items due of 80l. 11s. 5d.—leaving the mine actually in debt to the amount of 86l. 18s. 1d., which is 36l. 4s. 10d. less than our liabilities were at the last meeting in November, 1847. Before concluding, I beg to say that all our workings, in the different parts of the mine, are approaching points from which there is every expectation to suppose large deposits of copper ore will be met with, and are, I may fairly presume, near at hand.

WHEAL TREMAYNE MINING COMPANY.

The ordinary two-monthly meeting of this company was held at the offices, George-yard, Lombard-street, on Friday, the 14th inst.

R. R. MICHELL, Esq., in the chair.

The minutes of the preceding meeting having been read, the subjoined report and accounts were submitted:—

Wheal Tremayne, April 12.—There is nothing done in the bottom levels since the last report; but expect to resume working of them again by the end of this week. The water at this time is drained to the 70 ft. level. Since the dry weather has set in, we find the water decreasing a great deal. The lode in the 60 ft. level, east of Alexander's shaft, is 1 ft. wide, with some copper ore and tin in it—opening tribute ground. The lode in the 45 ft. level, east of Alexander's shaft, is 1½ ft. wide, producing a little copper and tin.

The lode in the 55 ft. level, west of Follard's shaft, on the engine lode, is 1 ft. wide, with a little tin in it; we have driven through a good branch of tin in this level for several fathoms; and, as this level is getting near the new shaft, we expect shortly to resume sinking the adit shaft; this level will come in about 20 fms. below the 40 ft. level—the distance being so great between the two levels, we intend to drive a midway level between them both; by so doing, we expect to throw open a great deal of tin ground in a short time. The lode in the 40 ft. level, west of the new shaft, on the engine lode, is 6 in. wide, worth 8l. per ft. for tin; we have driven through in this level about 50 fms. of good tin ground. The 25 ft. level, east of Allen's shaft, on Allen's branch, is worth 6l. per ft. for tin—this level is about 80 fms. east of Allen's shaft. On the whole, Allen's branch is much the same as it has been for several months past. The 30 ft. level, on the south lode, west of Thomas's shaft, driving towards Wheal Margaret, has been suspended for some time, owing to a great increase of water; we find the water greatly abated, and we have again resumed the driving. We do not know how large the whole of the lode is in this level; at present, we are driving on the flooken part, and shall shortly prove the other part of it; according to the indications, we think we are not far from a good lode. The water in Wheal Margaret is going down very fast—so that we have a hope of working that part of the mine again very soon. There is one great thing in our favour—the winter is now past, and we have before us a favourable time of the year. We have made preparations to work all the tin bearings we possibly can, while the favourable time continues. We calculate the stock of black tin on the mine to be not less than 25 tons.—WILLIAM BLEWETT; JOHN PHILLIPS.

By January cost	£1058	9	10
February ditto	1122	2	3-180 12 1
By sales of ore—February	£939	4	7
March	713	13	11
April	510	8	7
Less lords' dues	£2163	7	1
Coilage of tin, &c.	108	3	4-2055 3 9
			22 1 0
	£2077	4	9

Balance against the mine, 103l. 7s. 4d.; ditto from last acc., 391l. 1s. 10d.—194l. 9s. 2d.

The report and accounts were thereupon passed, and ordered to be entered upon the minutes.

In the course of the proceedings, Mr. REEVES directed attention to the formation of the company, and laid on the table the printed report, from which it appeared that 1300l. worth of tin was then at surface, and proceeded to enter into the accounts, as shown by the report, whereby he inferred that such sum had been, in the first instance, represented as being the property of the new adventurers; whereas, by a subsequent account, the amount was deducted, as being a debt due to the original proprietors, which was not the case.

Mr. FIELD entered into the several reports which had been made, as also the accounts submitted, upholding the position taken by Mr. Reeves; but, on explanation being afforded, expressed himself satisfied.

Some remarks having been made by the CHAIRMAN, Mr. TRENNICK, and others—after a vote of thanks to the chairman—the meeting adjourned.

GRANBLER AND ST. AUBYN.—A meeting of adventurers in these mines, was held on Tuesday last, when the following accounts for January and February were submitted:—To amount not divided at last account, 14s. 10d.; costs, &c., 826l. 16s. 6d.—827l. 11s. 4d.—By ores sold (less dues), 687l. 5s. 8d.; loss for two months, 140l. 5s. 8d.

TRESAVAN.—The accounts for January and February of this mine, of which the following is an abstract, have recently been audited:—By balance at the end of Dec. 607l. 9s. 4d.; ores sold (less dues), 3092l. 11s. = 3700l. 0s. 4d.—To costs and merchants' bills, 2902l. 15s. 7d.; leaving balance, 797l. 4s. 9d.

WHEAL BASSET.—A meeting of adventurers took place at the mine, on the 3d inst., when the following accounts were passed:—To balance last account, 511l. 8s.; costs and merchants' bills, 1514l. 19s. 9d. = 2026l. 7s. 9d.—By ores sold (less dues), 1530l. 6s. 6d.; balance due to purser, 496l. 1s. 8d.

WHEAL SETON.—The usual two-monthly meeting of adventurers was held at the mine, on Tuesday last, when the accounts for January and February, as follows, were allowed, and a dividend of 20l. per share declared:—By balance last account, 1590l. 0s. 3d.; ores sold (less dues), 4428l. 19s. 1d. = 6018l. 19s. 4d.—To costs and merchants' bills, 3192l. 9s. 6d.; dividend of 20l. per share, 1980l. = 5172l. 9s. 6d.; balance in purser's hand, 846l. 9s. 10d.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

POLSAITH CONSOLS.—I cannot think she will disappoint our expectations. The rich courses of ore, which have been taken from the back and bottom of the long adit, and the magnificent gossan lode, in the north part of the sett, are indications of too sure a character to mislead the adventurers.

WEST CARADON is also very much improved, particularly in Gilpin's lode, which is worth 20l. per ft., and of a rich character; this lode being valuable in two levels, from which increased returns may be expected in 3 or 4 months.

WHEAL TRELAWNY is looking up—the north ground being favourable (that is, gossan and ore,) and the 62 ft. level rich.

[From the Plymouth Journal.]

BRECHTOR.—There is a considerable improvement in the deep adit level towards the hill.

WHEAL FRANCO.—There is no alteration since our last.

PLYMOUTH WHEAL YEOLAND.—The engine-shaft is about 5 fms. under the 12 ft. level. The lode has not yet been cut in the deep adit; on the whole, the mine looks very well. The new south lode is producing excellent work.

PLYMOUTH WHEAL YEOLAND EAST.—The shaft is cleared to within a few feet of the back of the adit.

WHEAL AEL.—The shaft is between 11 and 12 fms. under the adit, the lode is unaltered since our last notice.

EAST CROWDALE.—The north and south cross-cuts in the 58 ft. level have been commenced, and there is a good paying lode in the winze, under 47 ft. level, in north lode.

CALLINGTON MINES.—These mines are looking well at present, a considerable improvement having taken place in the slopes on the copper lode, where they have now a lot of 4 ft. wide solid.

SILVER VALLEY.—We learn, with regret, that the enterprising adventurers are compelled to close this concern, which has been throughout so exceedingly well managed, and which at one period held out prospects of an abundant return to the shareholders. The engine, plant, and materials, will shortly be brought to public auction by Mr. Carne. [See advertising columns of this day's Mining Journal.]

[FROM A CORRESPONDENT.]

ANTIMONY AND SILVER-LEAD MINES.—In another column will be found the report, prepared by Professor D. T. Ansted, upon these mines; and we draw attention to it more particularly on account of the prejudices existing against the reports of Cornish agents in general, which, in many cases, are totally unfounded. From the well-known ability and talent of the professor

Current Prices of Stocks, Shares, & Metals.

STOCK EXCHANGE, Saturday morning, Eleven o'clock.	
Bank Stock, 9 per Cent., 187	Belgian Bonds, 4 1/2 per Cent., 47
3 per Cent. Reduced Ann., 81 1/2	Dutch, 3 1/2 per Cent., 37 1/2
3 per Cent. Consols Ann., 93 1/2	Brazilian, 5 per Cent., 59 1/2
3 per Cent. Ann., 82 1/2	Chilian, 6 per Cent., 80 1/2
Long Annuities, 8 1/2	Mexican, 5 per Cent., 14 1/2
India Stock, 10 1/2 per Cent., 228 30	Spanish, 5 per Cent., 10 1/2
3 per Cent. Consols for Acc., 82 1/2	Portuguese, 5 per Cent., 55
Eschequer Bills, 1000l. 3d., 39 41 pm.	Russian, 5 per Cent., 77

MINES.—The transactions in mining shares, during the week, have been of a rather limited character. Although several treaties for shares, in some of our leading mines, are in course of negotiation. The present quotations which are given for such shares, affords an opportunity for investment that does not frequently present itself; and, within the past few months, many capitalists have purchased mine shares as an investment, a security previously pre-judged and entertained as hazardous, who are now deriving the advantage of a more discerning judgment.

The reports we receive from our local correspondents generally, are of a very pleasing and satisfactory nature, as regards the improvements in many of our mines; but the standard for copper ore is so depreciating to selling adventurers, who are necessitated to conform to buyers prices, that it is done with regret and murmuring—hence, the favourable opportunity above referred to, which will give a rich reward to purchasers, in the event of an improved standard.

Inquiries have been made for East Wheel Rose, Levant, West Wheel Seton, South Wheel Francis, but we are not advised of any sales—sellers generally declining prices offered.

Shares in the following mines have been done this week; viz., Devon Great Consols, Trehaues, Calstock, Tin Vales, East Wheel Friendships, Bedford United, Marke Valley, &c.

The following arrivals of specie, this week, may be noticed. On Friday, the 7th, at Southampton, the Peninsular and Oriental Steam Navigation Company's ship *Sultan*, having 40 packages of specie, value 44,892l. 13s. 3d. sterling, and general cargo of valuable merchandise. Arrived at Liverpool, on Saturday, the 8th, the Royal Mail steam-ship, *Cambrian*, with 4000l. specie, in freight.

RAILWAYS.—Business in the share market was as heavy in the beginning of the week as at any previous period; as the week advanced, however, it improved, and better prices were realised, both at public sales and private bargains. There is reasonable ground for belief, that the low prices brought in some portion of dividend money for investment in several of the more favourite lines. French shares were more firm, from the statement, as reported, that the Government did not propose, absolutely, to take possession of the railways on terms of their own dictation, but that the shareholders would be previously consulted, and the conditions left to their option to accept or refuse. The settling day was on Thursday, which passed off well; the market remained firm, and without alteration.

RAILWAY TRAFFIC RETURNS.

Name of Railway.	Length, Rwy.	Present actual cost.	Price per share.	Last Div.	1848	1847
Birkenhead, Lancashire, & Chesh.	15	997,384	37	5 p.c.	£764	711
Caledonian	130 1/2	3,594,470	25 1/2	—	3629	—
Dublin and Drogheda	35	754,529	52	—	737	674
Dublin and Kingstown	7	473,282	7	7	797	737
Dundee, Perth, & Aberdeen Junction	47	415,073	27	8	857	343
East Anglian (Lynn to Ely)	58 1/2	1,062,742	6 1/2	—	474	—
East Lancashire	24	1,733,915	17 1/2	—	1119	665
Eastern Counties	221 1/2	6,259,709	13 1/2	4	11806	10061
Eastern Union	50	979,926	80	—	1046	92
Edinburgh and Glasgow	53	2,375,745	37	6	3368	3306
Edinburgh and Northern	29	953,207	18	—	1151	—
Glasgow, Paisley, and Ayr	64 1/2	2,097,321	70	7	2206	2208
Glasgow, Paisley, & Greenock	23	845,534	15	4	1084	1003
London and South-Western	110 1/2	1,876,326	16 1/2	8	216	1164
Great Western	281 1/2	10,570,636	86	7	19440	18285
Kendal and Windermere	10 1/2	169,888	23	—	127	—
Lancaster and Carlisle	70	1,395,193	43 1/2	4	1602	1117
Lancashire and Yorkshire	124 1/2	7,591,618	86	7	8884	8176
London and North-Western	428	21,513,343	128	8	38131	39076
London and Blackwall	4	1,241,061	44	1 1/2	804	912
London, Brighton, & South Coast	61 1/2	1,682,150	28 1/2	4	1852	7537
London and South-Eastern	189	6,264,164	20 1/2	8	7847	8012
London, Brighton, & South Coast	14 1/2	145,135	16	—	167	—
Manchester, Sheffield, & Lincolnshire	46	2,336,624	80	5	2047	2096
Manchester and Carlisle	28	440,851	39	3	522	623
Midland Company	402 1/2	9,853,122	96 1/2	7	19881	17676
Midland Great Western (Irish)	35	583,776	10 1/2	—	578	—
Newcastle and Carlisle	66 1/2	1,181,080	101 1/2	6	2015	2407
North British	161 1/2	1,624,150	62	5	1854	1519
North Devon	17	780,272	15 1/2	7 1/2	589	520
South Devon	29	1,609,071	20	5	537	527
South-Eastern	165 1/2	6,932,181	22 1/2	6 1/2	7703	7710
Taff Vale	38	8,005,56	—	8	103	1370
Ulster	36	646,211	52	6	842	903
Whitehaven Junction	12	147,095	—	6	167	—
York, Newcastle, & Berwick	232 1/2	4,065,526	29 1/2	8	10163	8614
York and North Midland	330 1/2	3,799,297	65	10	7582	5674

FOREIGN RAILWAYS.

Name of Railway.	Length, Rwy.	Present actual cost.	Price per share.	Last Div.	1848	1847
Amiens and Boulogne	68 1/2	573,338	5 1/2	4	1120	890
Antwerp to Ghent (monthly)	31	—	—	—	740	—
Belgian	—	—	—	—	—	—
Dutch Rhenish	57 1/2	—	—	—	1044	890
Northern of France	211	2,000,000	34	4	11032	11208
Orleans to Bourges (Central)	107 1/2	—	—	—	—	—
Orleans to Tours	72	600,000	32 1/2	4	2416	2794
Paris and Orleans	82	2,011,720	19	12 1/2	7662	—
Paris and Rouen	85	2,082,916	11 1/2	11 1/2	2864	8308
Rouen and Havre	58 1/2	—	—	—	—	—
Strasbourg and Bâle (monthly)	88	—	—	—	—	—
West Flanders	—	—	—	—	—	—

Total earnings for last week, £167,913, being an increase of £13,894 over last year.

TUTWICK AND TRIBUTE.

Sir,—Having entered into a discussion of these matters, a reply to the communications of "The Agents of the Perran St. George United Mines," and "A Mine Agent," will naturally be looked for from myself; and, in the course of my observations, I shall, for the sake of convenience, refer to the former as "The Agents," and to the latter as "An Agent." I observe, in the first place, that a fact is submitted for the consideration of Capt. Seymour and myself, with reference to certain language, touching the motives and experience of "An Agent;" but as nothing is to be found in my letter that can at all be considered contemptuous or impertinent, it will be but an act of fairness on their part to make a retraction of their remarks on this head, so far as I am concerned. It appears that the proposed remedy of "An Agent" has already been carried into effect at the Perran St. George United Mines, to the satisfaction of the agents, who have "set some of their bargains at one-fifth less than their own prices;" and, notwithstanding this, the gettings have amounted to a higher average than formerly. This, at first sight, seems to be good evidence in favour of the new system; but, on examining it a little more minutely, it will be observed, that "The Agents" have unwittingly exhibited a sad want of judgment in fixing their prices, as, if their calculations were correct, how does it happen that, although some of the bargains were taken at one-fifth less, the wages amounted to higher averages than before? It will, I presume, be contended, that the men worked with better spirits than in the old system; but I think a majority of experienced mine agents will bear witness with me, that miners will not work with spirit if they have a bargain under the captain's price. It is immaterial to me whether "The Agents" obtained their present situations through consanguinity or not—I leave to Capt. Seymour, who appears to be quite capable of answering for himself.

"An Agent" has acted rather prematurely in bringing this subject before the public, as his principal objection to the old method—viz.: that when men do not get wages this month, they expect to have it made up the next, &c.—is, after all, but an abuse, which can be easily and effectually remedied, if the agents (and it is their duty so to do) will adhere to the old rule, and give a fair price in sight for every pitch and bargain they set.

I assure "An Agent," in the utmost good humour, that his reasons are not of sufficient magnitude to convince me that the old system should be done away with, just because it may, in some instances, have been abused; and I am of opinion, that he would have acted more in conformity with the feelings of a great portion of your readers, if he had made a proposition for an advancement, rather than a reduction, of miners' wages.

FAIRPLAY.
Tutwick, April 12.

[The letter of Capt. J. Seymour (Carleton Wheel Hooper), will appear in next Journal.]

Durham.—G. Summerson, a plumper, fell down the Danwell Pit, and was killed. He was near-sighted, and is supposed to have fallen down accidentally.

Monmouthshire.—J. Williams, while charging the kiln with iron mine, slipped into the burning mass, and was so seriously injured, that he died three hours after.

Abergarrrh Colliery.—An explosion occurred here, by which three men were severely burnt; one is not expected to survive.

Chertsey.—On Saturday last, one of the excavators near this town was instantaneously killed by a sudden fall of earth and stones.

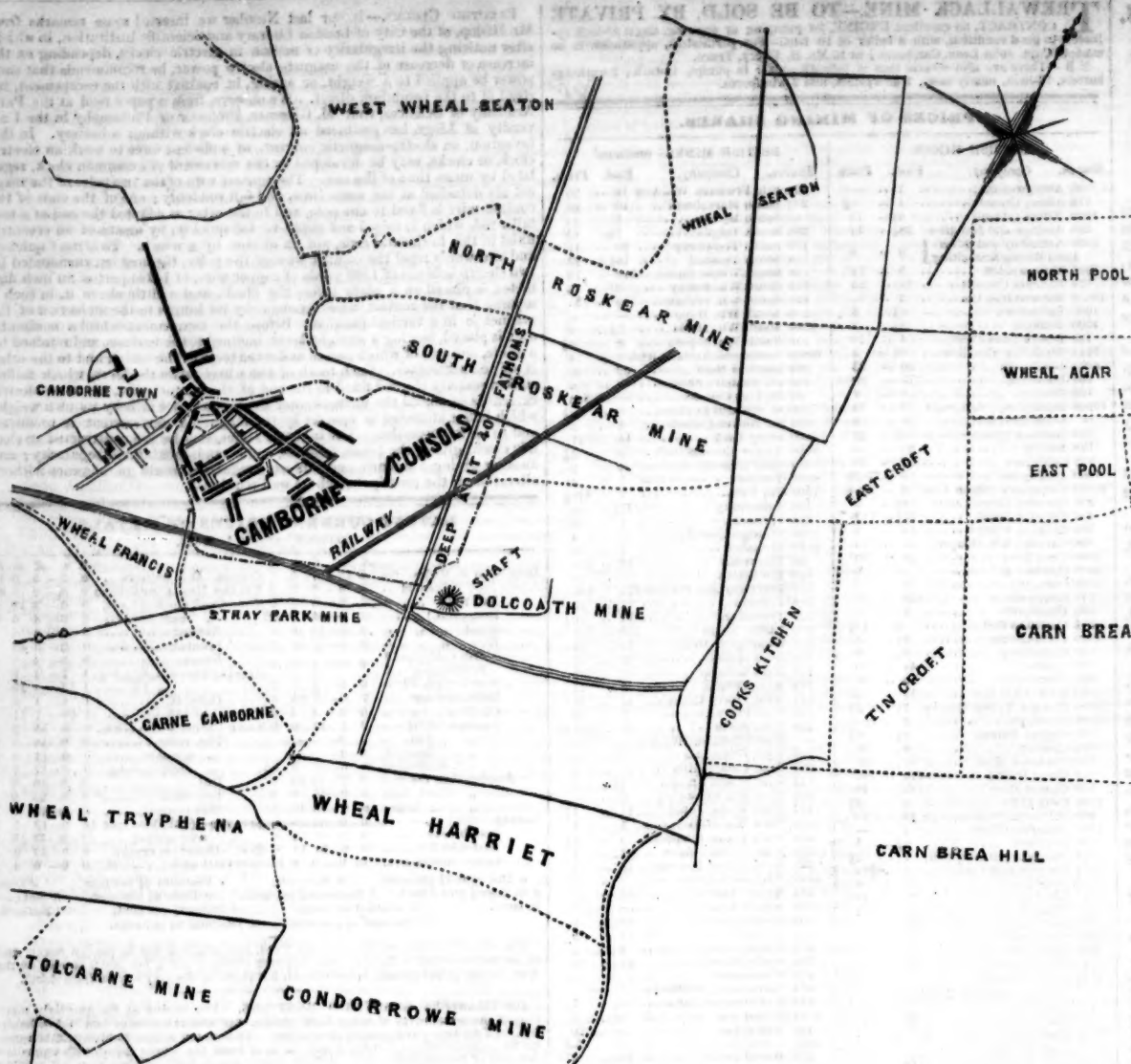
TREWALLACK MINE.—TO BE SOLD, BY PRIVATE

CONTRACT, an excellent ENGINE, for pumping or drawing, about 20-inch cylinder, in good condition, with a boiler of 10 tons.—For particulars, application to be made to Capt. John Leach, Camborne; or to Mr. H. Ellery, Truro.

N.B.—There are also several tons of pit-work, viz.: 18 pumps, 18-inch; 2 working barrels, 18-inch, nearly new; 2 doorpieces, and 2 windroves.

PRICES OF MINING SHARES.

BRITISH MINES.				BRITISH MINES—continued.					
Shares.	Company.	Paid.	Price.	Shares.	Company.	Paid.	Price.		
1000	Abergreskin	7	—	250	Sth. Friends. Wh. Ann	16	25		
512	Albert Consols	1	—	200	South Harvannah	10	25		
1024	Alfred Consols	4 1/2	14	—	South Motton	5	10		
235	Andrew and Nangiles	28 1/2	10	250	South Tugus	7 1/2	42		
1000	Anthony and Silver	5	—	250	South Trevelaney	20	11		
Lead Mining & Smelting				128	South Trelawny	16 1/2	20		
1624	Ballewadden	9	18	128	South Wheal Bassett	110	70		
128	Balmossie Consols	25	25	250	South Wh. Betsy	5 1/2	6		
10000	Bannan Iron Co.	3	—	124	South Wh. Francis	160	23		
1000	Barristown	4 1/2	3	250	South Wh. Hope	—	5		
4000	Bedford	23 1/2	3	1000	South Wh. Maria	24 1/2	2		
128	Besore Lead Mine	14	10	250	South Wh. Sophia	4	44		
1244	Birch Tor Tin Mine	9 1/2	4	10000	Southern & Western, Irish	2	4		
9000	Blaydon	50	33	250	Spearhead Moor	30	40		
100	Botallack	175	80	250	St. Austell Consols	9	40		
128	Broom's Barn	14	10	94	St. Ives Consols	—	330		
10000	British Iron, New, regia.	10	13	128	St. Michael Penkivel	5	10 1/2		
—	Ditto ditto, scrip.	10	10	999	St. Minver Consols	1	6		
128	Budnick Consols	52 1/2	30	1000	Stray Park	43	17		
128	Burtly	20	21	9600	Tamar Consols	3	4		
128	Calstock	17	30	1024	Tavy Consols	4	9		
1000	Callington	19	27-28	6000	Tincroft	7	4		
30000	Cameron's Steam Coal	4	58-4	1000	Tin Vale	2	41-4		
250	Caradon Copper Mine	24 1/2	17	128	Tockenbury	147 1/2	10		
250	Caradon Mines	24 1/2	17	250	Treanor	2	26		
250	Caradon United	24	5	3000	Treleigh Consols	6	3		
250	Caradon Wh. Hooper	21	14	2000	Treanor	2	50		
1000	Carn Brea	15	90	96	Treanor	10	210		
3000	Carthew Consols	11 1/2	6	120	Trevelian	5	16		
2048	Cascade	1	2	120	Trevelian and Barrier	130	125		
112	Charlestown	220	30	288	Trevelian	11	25		
166	Cleveland	9	5	128	Trevelian	12	26 1/2		
152	Coastille Hill	3	1-1/2	1000	United Mines	300	350		
1900	Cornubian	7 1/2	3	250	Wellington Mines	15	25		
500	Cornblaw	54	6	128	West Bassett	20	10		
128	Cornfort	40	90	250	West Caradon	20	10		
250	Cornthorpe	20	30	128	West Cargill	3	12		
250	Cook's Kitchen	14	2	512	West Fowey Consols	40	15		
1000	Coombe Valley Quarry	24 1/2	24	250	West Fowey	9	25		
6300	Cornish	2	24-24 1/2	200	West Fowey	9	25		
1000	Copper Bottom	4	20	200	West Fowey	9	25		
1024	Cuckoo	4	20	—	West of Scotland Iron Co.	210	210		
240	Cradock Moor	16 1/2	13	128	West Trevelian	5	30		
128	Creag Braws	120	100	250	West Trevelian	5	30		
500	Cubert Mine	124	10	512	West Wheal Francis	13	5		
1000	Cwm Eryn	3	24	250	West Wh. Friendship	9	12		
300	D.Prior & Buckfastleigh	14	20	3845	West Wh. Jewel	11	1 1/2		
7100	Demelza Mines	2	5	2500	West Wh. Maria	3	1		
1000	Devon	8 1/2	5	250	West Wh. Shepherd	5	24		
1024	Devon & Courtney Con.	7 1/2	24	250	West Wheal Tugus	214	7		
1024	Devon Great Consols	1	210	250	West Wheal Trevelian	19	15		
1000	Diabolo	2	5	5200	Wicklow Copper	5	11		
186	Dolcoath	30	40	184	Wheal Adams	51	10		
250	Drake Walls	4	4	1000	Wheal Agar	10	10		
10000	Durham County Coal	15	5	250	Wheal Albert	10	8		
3000	Dyffryn	10	12 1/2	128	Wheal Acland	13	2		
250	East Adonis	19	12	250	Wheal Allen	2	5		
112	East Cadeo	19	47	240	Wheal Anderson	21	24		
2048	East Crowdale	51	4 1/2	128	Wheal Ann	—	304		
512	East Comb Silver-Lead	6 1/2	6 1/2	512	Wheal Ann, Bridford	1	2		
128	East Pool	5	15	1024	Wheal Anna Maria	34	5		
100	East Reliance	22	40	120	Wheal Bal	44	8		
9000	East Tamar Consols	2	1	2500	Wheal Barbara	14	4-5		
—	East Wheal Albert	1	3	250	Wheal Benny	104	6		
512	East Wheal Croft	123	280	250	Wheal Blencowe	21	5		
1024	East Wheal Fortune	2	3	250	Wheal Buckets	20	5		
1024	East Wheal Friendship	3	3	250	Wheal Calstock	5	10		
128	East Wheal Rose	60	990-1000	128	Wheal Clifford	190	190		
2048	East Wh. Rough Tor	4	2	128	Wheal Constan	—	20		
—	East of Scotland Iron Co.	24	12	128	Wheal Courtney	—	20		
123	East Wheal Seton	14	10	6000	Wheal Curtis	3	34		
250	Elborough	14	2	500	Wheal Dyke	12	13		
250	Exmoor Wh. Eliza	34	6	250	Wheal Fortescue	64	5		
512	Fowey Consols	40	45	2048	Wheal Frederick	2	2		
100	Gadair	2	2	388	Wheal Franco	27	30		
20000	Galvanised Iron Co.	10	9 1/2	128	Wheal Harriet	45	50		
4000	Gen. Mining Co. for Irel.	14	14	250	Wheal Jane	21	15		
2018	Georgia Tin Mines	14	15	250	Wheal Louise	79	350		
250	Gonaum	32 1/2	30	112	Wheal Margaret	79	350		
128	Gouyru	4	1 1/2	512	Wheal Mary Ann	5	16		
214	Gouyru & St. Aubyn	1000	400	250	Wheal Mary Consols	40	26		
128	Great Consols	1000	400	210	Wheal Prospect	4	7		
250	Great Calstock Moors	22	23	120	Wheal Reuth	41	150		
250	Great Mitchell Consols	14	34	250	Wheal Rose	60	15		
250	Great Resunga Moor	11	8	2048	Wheal Santon	4	4		
12	Gr. Wh. Itou Tor Con.	134	18	99	Wheal Seton	214	1000		
600	Gringolven	5	—	250	Wheal Sisters	304	17		
1000	Heigstons	7	5	250	Wheal Sophia	54	10		
250	Herodscote	54	44	128	Wheal Spearne	10	75		
56	Herdosfoot	18	19	128	Wheal St. Ann	9	12		
1000	Hibernian	124	16	—	Wheal Treacoll	11	121		
339	Hobbs's Hill	6	3	250	Wheal Trevelaney	74	50		
1000	Holmshush	19	9	250	Wh. Tremanne (St. Ervan)	44	20		
127	Kirkcudbrightshire	54	5	250	Wheal Tremyne	35	15		
148	Lamherooe Wh. Maria	11	4	128	Wheal Trevelian	2	21		
60	Leasant Consols	90	60	250	Wheal Trevenna	2	4		
60	Leasant Consols	90	60	92	Wheal Tryphena	140	265		
100	Lewis	15	64	242	Wheal Venland	294	30		
1000	Llwyn Males	5	—	250	Wheal Vow (Perranz)	4	4		
1000	Llwyni Iron	50	53	184	Wheal Vyvyan	—	60		
250	Lostwithel Consols	15	15	250	Wheal Williams	6	14		
100	Marke Valley	10	44	FOREIGN MINES.					
100	Mendip Hills	24	1	5000	Astoria Mining Company	144	24		
100	Merionethshire Slate	14	2	10000	Astoria Mining Co.	12	24		
100	Mining Co. of Wales	7	54-6	20000	Australian	24	3		
250	New East Crowdale	34	34	10000	Anglo-Mexican Co.	100	2		
1000	North Fowey Consols	37	34	12374	Ditto Subscription	25	24		
300	North Pool	45	40	6000	Barossa Range	4	2		
400	North Roskear	54	130	3000	Bolinas	150	34		
600	North Wh. Abraham	1	1	2000	Ditto Scrip	15	3		
62	North Wh. Lelure	14	2	12000	Brazilian Imperial	23	54		
68	North Wh. Providence	23	3	10000	Colore Company Co.	55	18		
100	Northern Coal Co.	21	—	10000	Colore Company Co.	55	18		
100	Pennant	14	2	5000	Ditto Scrip	54	1		
100	Pemrhil	30	65	5000	Copapo Mining Co.	14	24		
100	Perran St. George Un.	13	20	10000	General Mining Ass'n.	20	124		
60	Perran Wh. Virgin	94	10	5000	Kinzigthul Mining Ass.	2	4-14		
2	Plymouth Wh. Yeoland	61	23	20051	Mexican Company	69	—		
6	Polsath Consols	44	7	2000	Mexican & South Amer.	7	14		
2	Providence Mines	35	40	29320	(Hillside Monte, regia.)	284	14		
100	Rannoch Iron	30	20	Ditto Red Debitures				—	10
2	Rannoch Iron	30	20	Ditto Black ditto				—	54
2	Rannoch Iron	30	20	Ditto Loan ditto				—	60
10	Rosewall Hill	1	3	2000	Pachuca Santiago	10	6		
10	Rosewall Hill	1	3	2000	Pachuca Mines	4	44		
10	Rosewall Hill	1	3	11000	St. John del Rey	15	7		
10	Rosewall Hill	1	3	13174	United Mexican	—	14		



CAMBORNE CONSOLS MINES.

These sets, in the parish of Camborne, in the county of Cornwall, held under Sir R. R. Vyvyan, Bart., M.P., E. W. W. Pendarves, Esq., M.P., and C. Reynolds, Esq., are situated in, perhaps, the richest metalliferous district in the kingdom, bounded on the south by Stray Park, north by North and South Roskear, Wheal Seton, and West Wheal Seton, east by Dolcoath, Cook's Kitchen, Tincroft, and Carn Brea, and north-east by East Croft, East Pool, and North Pool.

The Dolcoath deep adit, which is driven on a cross-course, divides the set; and, in its course, intersects the lodes at the depth of 40 fathoms—crossing those of Dolcoath known as the South Entral, the Silver, the Entral, the North Entral, and North Lodes, as also the South lodes in East Wheal Croft—the several lodes being, throughout the set, whole to surface, the extent of which is upwards of 400 fathoms east and west, and about 300 fathoms north to south; and, judging by the returns from the mines heretofore worked in the immediate vicinity, little or no doubt can be entertained of profitable and lasting returns. Indeed, the advantages which these mines present, coupled with their locality, render them, perhaps, one of the best mining properties in the county of Cornwall.

The nature of the strata is that of the adjacent mines—having large elvan courses intersecting the lodes, and which have invariably, in this district, led to lasting and profitable courses of ore.

The South Entral lode alone has been a source of immense wealth to the Dolcoath adventurers, while the silver lode has produced many thousands of pounds worth of silver, close upon the eastern boundary. The north lode would appear to have been the primary object of the party who resumed the working of Dolcoath; but from the rich discoveries of copper ore made on the South Entral, and other lodes south, the original object seems to have been neglected, and finally abandoned, on account of difficulties which existed in obtaining a grant of the ground on the north part of the set; and it is only by a recent arrangement with the proprietors of Camborne Consols, that the adventurers in Dolcoath Mine have been placed in a position to pursue operations upon the north part of the set, the proprietors of Camborne Consols having, by such arrangement, secured the use of a shaft on the South Entral lode—being 80 fathoms deep, or 40 fathoms below adit. The shaft so conceded will afford immediate facility for laying open and driving upon the several lodes referred to, at a depth of 80 fathoms, without the aid or expense of steam machinery, or any other power; and, looking to the produce of the lodes in the neighbourhood, we feel justified in assuming that large returns will be made.

It appears to have been the proprietor's original intention to work the sets by the issue of 1000 shares; but the value and peculiar advantages attendant on the working of the mines being apparent, parties have agreed to furnish the necessary outlay, so as at once to proceed actively in developing the resources of the mine, and yielding returns; it being contemplated, that, with an outlay of 100l. per month, the mines will, at an early day, be brought into a profitable state of working. With this trifling cost the several lodes may be opened upon and explored at 40 and 80 fms.; while, in the adjacent mines, a steam-engine, and the requisite machinery, sinking-shaft, and other costs, has been attended with an outlay of some 15,000l. to 20,000l., irrespective of the importance to be attached to the adit already driven, which takes the lodes at 40 fms. depth.—The following is a rough estimate of the profits divided, and present value of the mines immediately contiguous to those under notice:—

Mines.	Profits divided.	Present value.
Stray Park.....	£100,000	£17,000
Dolcoath.....	300,000	9,300
Cook's Kitchen.....	300,000	5,120
Tincroft.....	200,000	48,000
Carn Brea.....	150,000	90,000
East Pool.....	20,000	2,510
Pool and East Croft.....	200,000	35,820
South Roskear.....	150,000	10,000
North Roskear.....	80,000	21,700
Wheal Seton.....	30,000	108,000
North Pool.....	5,000	37,000
Total.....	£1,535,000	£375,360

Thus, after making the enormous profits of no less a sum than 1,535,000l., these mines are, according to our Share List, now worth 375,360l.

It will be apparent, from the above statement, that the several mines enumerated have yielded vast returns, and, at this moment, maintain a position in the market, best understood by the value attached, as shown in our share list; while a reference is thus made to the mines in the immediate vicinity, as to the returns made, we may, by way of further exposition, refer to the actual profits and cost, as also the present price of some few.

Shares.	Paid.	Price per Share.	Market Value.	Returns.
Carn Brea..... 1000	£15 0 0	£20 0 0	£20,000	£150,000
Dolcoath..... 126	30 0 0	50 0 0	6,300	300,000
East Pool..... 128	5 0 0	15 0 0	1,920	20,000
East Wh. Croft..... 94	125 0 0	280 0 0	26,320	200,000
North Pool..... 100	45 0 0	450 0 0	45,000	—
North Roskear..... 140	5 5 0	130 0 0	18,200	80,000
Wheal Seton..... 25	214 0 0	300 0 0	7,350	30,000
Total.....			£107,790	£780,000

* We have not the returns made by this mine; at the same time, we may observe, the last not being set to work.

The sales of ores from the respective mines, to which reference is made, have, within the last month, yielded as follows:—

	Tons.	Value.
Stray Park.....	536	£2107
Dolcoath.....	266	1023
Tincroft.....	601	1799
Carn Brea.....	1091	assumed 5750
East Pool.....	145	464
Pool and East Croft.....	572	1939
South Roskear.....	134	734
North Roskear.....	784	4076
Wheal Seton.....	770	4150
North Pool.....	834	3646
Total.....	£5783	£35,698

We present annexed a map of the district, whereby the position of this particular set will be at once seen; at the same time that such will be useful for reference by parties interested in mines in that locality, as a companion to the hand-sketch given of the Caradon district. The relative positions of the mines east of Dolcoath, North and South Roskear, &c., as will be observed, are roughly set out, but sufficient for our purpose.

POLBERRO MINES—NEW ADVENTURE.—We are glad in being able to announce, that the evils which have been anticipated to the populous district of St. Agnes, from the expected abandonment of the Polberro Mines, have been happily obviated, from arrangements having been come to by the different parties interested in the concern, by which the various and heavy claims against it will be satisfied, and funds provided for the further prosecution of the adventure. We have seen a copy of the prospectus, which details the terms upon which new capital is to be brought into the concern, and the mode in which the management is to be conducted. One thousand new or preferential shares, of 15l. each, are created, which are to be allotted by the finance committee, and Mr. John Taylor, jun., who has been appointed the future manager of the adventure. Of these shares, a number have been taken up by parties already interested in, or rather having claims against, the property; the remaining shares will be allotted to other applicants. We are also informed, that promises of new sets, or licenses, on liberal terms, have been obtained from the Duchy of Cornwall, and the Lords of Tyas. The mines are situated in the parish of St. Agnes, and are some of the most ancient in Cornwall. The sets are very extensive, and are bounded on the north and east by the sea; the surface is 300 ft. above high-water mark, and the underground workings are drained to that depth by adits, driven at the foot of the cliff. Immense quantities of tin have been raised, and large profits realised. There are engines both for pumping and winding; also a stamping-engine, with machinery—perhaps, one of the finest and effective ever built. On the surface, there are offices and buildings of every necessary kind, and ample stocks of materials for carrying on the mines. The mines at present are in the hands of the Registrar of the Stannaries Court, and can be redeemed for 7500l.; while the plant is worth 9000l. to sell by auction. The remaining 7500l. will be applied to carrying out the plans for future working. It is fully expected the mines will become profitable in 12 months, and remain so for a long series of years.

THE MINES OF MEXICO.—The conduct of the United States, during the late invasion of Mexico, has given general satisfaction to those embarked in mining operations in that rich mineral republic. General Scott, and the other commanding officers of the United States army, have, throughout the campaign, held the mining districts to be perfectly inviolable, whether the mines were worked by British or native adventurers, so as not to compromise themselves with the British Government, or prove to the world that their object was rapine and plunder. As a matter of course, this war has caused very great losses to, not only English companies in that country, but natives, by the suspension of their operations at intervals; and, we are informed, that, in consequence of the representations which have been made by this Government on the subject, as far as regards British interests to the American Congress, there is a likelihood that some compensation will be decreed by that Assembly. This is only what ought to be—as nearly the whole of the mines of Mexico are worked by English capital, and that at an enormous outlay; as, unfortunately, the companies have chiefly confined themselves to the working of the old and nearly exhausted mines of the ancient Spaniards, instead of exploring new ones. The peace recently concluded between Mexico and the United States, on condition of the former making a large recompense for the expenses incurred by the war; and the territory of New Mexico, conceded to her by the treaty, will, no doubt, lead to beneficial results, and give a great impetus to mining operations in that portion now of the United States. The Congress has decreed, that the concessions which had been made to various parties, by the Mexican Government, in that hitherto neglected portion of the republic, will be guaranteed by it, under specific conditions; and that they can remain as American citizens, or receive a certain compensation for their mines, should they wish to relinquish their workings, and retire to their mother country, or present republic of Mexico. The Americans have long had the ambitious desire of acquiring this new territory, which the recent treaty has completed, although at a large pecuniary cost; but this they are satisfied with, as it has not involved them in a war with England, and will give them the opportunity of carrying out the grand project of joining the Atlantic with the Pacific, by means of a navigable ship canal, and thus open enormous facilities for the extension of their commerce.

Proceedings of Public Companies.

MEETINGS DURING THE ENSUING WEEK.

MONDAY.....	Australian Mining Company—offices, at One.
	Dartmoor Consols Mining Company—George & Vulture Tavern, Twelve.
	London and Brighton Railway—London-bridge Station, at Twelve.
TUESDAY.....	Grand Surrey Docks and Canal Company—offices, at Eleven.
	East Indian Railway—London Tavern, at Twelve for One.
WEDNESDAY.....	Wheal Typhena Mining Company—Commercial Hotel, Camborne.
	Legal and General Life Assurance Company—offices, at One.
	Independent Gas-Light and Coke Company—London Tavern, at One.
THURSDAY.....	Kinsghal Mining Association—offices, at One.
	Asylum Life Assurance Company—offices, at Two.
	Amicable Society—Serjeants' Inn, Fleet-street, at One.
SATURDAY.....	Claridge's Patent Asphalt Company—offices, at Two.

[The meetings of Mining Companies are inserted among the Mining Intelligence.]

NOTICES TO CORRESPONDENTS.

It will at all times be much trouble, and frequently considerable delay, if communications are simply directed—

TO THE EDITOR,

Mining Journal Office,

26, FLEET-STREET, LONDON.

Also, to avoid trouble, Post-Office Orders should always be made payable to WILLIAM SALMON MANSSELL, as acting for the proprietors.

* * We should feel obliged to all pursers, captains, or adventurers, to forward particulars of meetings, &c., of the mines with which they may be connected, on the earliest opportunity; that they may be published in the Journal with as little delay as possible.

EL ORO MINE, MEXICO.—Sir: I should feel obliged if any of your correspondents would inform me of the progress of operations at this mine?—A SUBSCRIBER.

"A Young Miner" should apply to a broker—he will find some particulars in our share list.

GADAIR MINES.—The report of Mr. English must necessarily stand over until next week. A very heavy pressure of matter compels us to postpone several of our leading articles, and some letters from correspondents, &c.

The MINING JOURNAL is published at about Eleven o'clock on Saturday morning, at the office, 26, Fleet-street, and can be obtained, before Twelve, of all news agents, at the Royal Exchange, and other parts of London.

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USED IN ENGLISH AND FOREIGN MINING DISTRICTS.

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THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, APRIL 15, 1848.

Among those in the upper ranks of life, who have devoted their capital, time, and energies, to the comfort and well-being of the British miner, and that not alone from interested motives, Sir CHAS. LEMON has long held a distinguished position. Largely connected with mining property, both as a landowner and adventurer, he has ever endeavoured to further legitimate mining, ameliorate the condition of the working miner, and advance the general interests of all connected with his native county. As a supporter of all the admirable institutions in the county, Sir CHARLES stands pre-eminent; and when we recollect to mind his magnificent offer, with reference to the establishment of a mining school, some few years since, we can only blush, that he was not supported in so philanthropic and important an undertaking, which, through the apathy or illiberality of his fellow Cornish capitalists, who had obtained their large wealth from the miner's toil, was allowed to fall to the ground. It is with great pleasure we observe, that a mark of esteem and respect is about to be conferred on him by the members of the three Royal Institutions of Cornwall, of which Sir CHARLES is the indefatigable president, by having his bust modelled, and a cast from it placed in the hall of each institution. To give every member an opportunity of testifying his respect on this occasion, it has been decided that the subscription shall be in small sums; and we could wish that it might not be confined to the members, but to the county, as a large portion of the inhabitants would be happy to join in such a demonstration. There are some few points on which, it is true, we have differed with the hon. baronet, with regard to the duties on foreign copper ore; but, conscientiously believing that he has ever been sincere in his expressed opinions, and that he has ever considered the measures he advocated were for the public good, we heartily congratulate the county on putting forth, greatly to their credit, this mark of esteem, for an upright and honourable man.

In another column will be found a report of a meeting of the ASTURIAN MINING COMPANY, for the purpose of complying with a new law for regulating joint-stock companies in Spain. It appeared a matter of surprise to all present at the meeting, for what useful purpose such a law could have been promulgated—as this particular company, as well as all others in Spain, were acting under the usual regulations prescribed by that law by which they were duly authorised. Yet, here are they called upon to petition by a majority of shareholders, for a Royal Authorization, or, in the event of neglecting to do so, to be dissolved, and to wind up their affairs. Whatever can have been the motive of the Spanish Executive in framing a law, productive of much inconvenience and annoyance, we know not; but such apparently futile legislation is of some importance to, and worthy of the consideration of, all parties in England, who hold an interest in companies in a country where their regulations are liable to continual change, and the value of their property, consequently, to continual fluctuation.

The recent confiscation of two of the principal and best circum-stanced lines of railway in France, by the Provisional Government established in that country, is one of the most revolutionary acts which has marked the revolutionary period since the installation of the Republic. With others more competent than ourselves to form a correct judgment as to the future, we fear this is but the commencement of a series of spoliations, which may in turn visit all the classes which have anything to lose. The waters are out, the foundations of the great social deep are broken up, and the wisest and best instructed cannot either foresee or forecast the extent of the inundation. The clubs of Paris, which are daily increasing in influence and audacity, are understood to insist on further invasions of the rights of property, and are advising the absorption of the Bank and of the mines of France by the Government of that devoted country. It is impossible to say what interest, public or private, is secure from being swallowed up in this new and enormous vortex—to us it appears perfectly certain that all accessible property is in danger; and if we ourselves were at this moment holders of a single acre, or of 50 Louis d'ors' worth of any other marketable material, we should exchange for any equivalent value elsewhere.

SHROPSHIRE MINERAL RAILWAY.—We understand the disagreements existing between the engineer and direction of this company are about being brought to a close—the parties having consented to abide by the decision of arbitrators, who are now sitting, hearing evidence, at the Gray's Inn Coffee-house. Some curious matters, we understand, are being brought to light—for instance, several miles of the plans and sections are missing, and much doubt is thrown, of course, on their correctness—nay, even their execution not credited; and the engineers, it appears, must have regarded themselves famously at the Eton Hotel, Ironbridge, as the venerable landlady of that establishment is summoned to vouch for the correctness of her bill, amounting to 800l. "Engineering difficulties," at least, were no obstacles to the overcoming of that part of the project. The general opinion seems to be, that the existence of the undertaking might have been prolonged—certainly so, with advantage to some parties, if not to the shareholders.

PROGRESS OF FRENCH MINING INDUSTRY.

[FROM OUR PARIS CORRESPONDENT.]

On the whole, things have been better, during the last few days, than at any period since the Revolution. The funds, railway, mining, and other shares, have all advanced in the Bourse; business has been less prostrated; in Paris there have been no disturbances, no alarming demonstrations; and there has been something like a revival of confidence. Moreover, the alarm which was felt, with respect to the general elections, has almost entirely subsided, owing to the peaceable and orderly manner in which the elections of officers of the National Guard have gone off. In order not to be accused of drawing too favourable a picture of the present state of things, it may be mentioned, that disturbances have taken place at Havre, Toulouse, Rheims, Valence, and some other places; but, so far from these affairs creating any disquietude, they have had quite a contrary effect; for, as in every case the disturbances were put down by the National Guard, they have afforded proof, that the orderly and well-disposed are stronger than the turbulent.

I learn, on good authority, that the Government is quite determined on getting all the railways into its own hands. You will see, that some of the newspapers state, that it intends also to take mines, insurance companies, iron works, &c. But, for my part, I cannot believe that it entertains any such wild intention.

The alarm which was excited last week, with respect to this matter, by the unscrupulous manner in which the Government sequestered the Orleans and Centre Railways, has subsided. People now see, that there are 10,000 very good reasons why a Government should be anxious to be at the command and management of the great lines of railway communication, especially in a country like France, where the State has been for centuries the only road-maker and road manager, and where, besides, the railways have been formed, in a great measure, by its capital. But people also see, that there is not one reason why the Government should undertake to work mines, and carry on furnaces. To do so, in fact, would be plunging into the wild schemes of the Socialists, who contend that the State ought to do everything—even to the manufacture and selling of tallow candles and lucifer matches.

As regards England, I am strongly inclined to think that it will be decidedly to her interest for the Government to take the railways. Once in the position of a railway proprietor, the Government would soon become alive to the burden and wickedness of the ironmasters' monopoly. It would soon experience the disadvantage of having to pay them about one-third more for iron than England and Belgium would supply it for. This would naturally lead to inquiry, and inquiry would lead to the discovery, that a most unrighteous and unreasonable monopoly exists, and has existed for years, in a country which professes to allow no monopoly, no privilege. Need we say, that such a discovery would be promptly followed by the complete annihilation of the monopoly.

A few weeks ago, I referred to the returns of the Government mining engineers, respecting the manufacture of steel. The *Journal des Chemins de Fer et des Mines* also referred to the same subject; and, like the *Mining Journal*, concurred in recommending an alteration in the tariffs, so as to increase the importation of good steel. These remarks appear to have greatly displeased certain parties in this country, who are interested in keeping things as they are. They have accordingly drawn up an answer to them, of which I give the substance, in the belief that it will be interesting to your readers. First of all, then, they begin by urging that it is not true, as stated in the report of the engineers employed by the Government, that France does not produce the ore adapted to produce good steel. "M. Fournel, chief engineer of the mines in Africa," they state, "has shown that our African colony could produce precious ores, exactly the same as those of Sweden. M. Lefrançois and M. Gaymard, mining engineers, have shown, after answering those who recommend the English steel, that our works, in the departments of the Isère, Corsica, and the Pyrenees, produce steel of a superior quality; and that, by the introduction of certain improvements, the iron of Sweden might be entirely dispensed with. But," they continue, "what is meant by Swedish iron? Is it the iron of the first quality? That iron has belonged, for more than a century, to the firm of Sykes, of Hull, in England; and it would be impossible for France to procure a single pound of it, even second-hand. On this point, no dispute is possible; the fact is notorious. Is it the iron of Sweden of the second quality? France has no need of it; for, notwithstanding all that is said, our country produces the greatest and finest variety of steel of any in Europe. With such materials France could manufacture as good iron as that of Sweden, of which the firm of Sykes has obtained possession for ever. In fact the steel she makes is excellent, and this is generally admitted at St. Etienne. We have even seen the English themselves request to be allowed to take away cannon manufactured at St. Gervais, in the department of de l'Isère, on account of the excellent material of which they were made, and which the English were desirous of imitating." The note, from which these citations are made, then proceeds to remonstrate against the attempt to modify the tariff, which, by affording protection to the *acières fondus* and the *acières de cimentation*, has caused the manufacture of them to take a vast development. But, on this point, the note is not very strong; for though it says that the national manufacture has become so extensive, and so cheap, that it beats the foreign out of the market, it yet asks for protection.

Some of the newspapers have made a great splutter about the bad spirit which, they pretend, is displayed in the mining districts. I have journals and letters from those parts of the country, and find no accounts at all calculated to excite alarm. Neither the journals of the northern department, nor of the Loire, speak of the miners being on strike, or of their having committed disturbances. The accounts that I have, on the contrary, are, generally speaking, very satisfactory. In the Haute Marne, for example, which is the great iron district of France, the men employed in several of the iron-works have voluntarily offered to work for less wages, so long as the commercial crisis shall continue.

Among the meetings of shareholders which are about to be held, are those of the Loire on the 15th; of the Vieille Montagne on the 29th; and of Valentin Cocq on the 20th.

It is on the 22d of this month, that the Minister of Marine will receive contracts for the supply of several thousand tons of English coal for the navy.—Paris, Thursday.

BELGIUM.—The men employed at several of the coal-pits have struck for an advance of wages, or for other causes; but nowhere have they committed much mischief.

There was rather a considerable falling off in the exports of coal during the first two months of the present year, compared with the same period of the last and preceding year; but in iron, &c., there has been an increase.

GOVERNMENT CONTRACT FOR COALS.—The Admiralty Commissioners have given notice that, on Thursday, the 27th instant, they will be ready to treat with such persons as are willing to contract for supplying the dockyard at Hasleholme with 1500 tons of Welsh coals, fit for the service of the navy. On Tuesday last, the following contracts were concluded:—5000 tons at Dover; Holyhead, 2500 tons; Kingston-on-Hull, 1400 tons; Port Patrick and Donaghadee, 2500 tons, within 12 months from 1st May next. There was strong competition, and several offers were extremely low; Government, however, is not bound to accept the lowest tender, which gives an opportunity for considerable favouritism among the executive of the Admiralty. Like many other contracts the Government ones are open to much abuse, which it would be well for the mining interest to reform, and throw them open to fair competition, which, unfortunately, is not the case at present, being mostly confined to the few who have interest with secretaries and others at head quarters.

MINING ON THE CONTINENT.—As we have stated before, the miner, in every country, is a distinct being from any other class of his species. He troubles not his mind with intestine political commotions at home, or revolutions abroad—the whole of his ideas are concentrated in the bowels of the earth, and the prosperity of the mine he is working or exploring, careless of all the great passing events of the day, which occupy the other portion of mankind, so long as he and his family are provided for by his secluded industry. According to the mining reports from all the continental states, the changes and commotions that have and are taking place, have not, to any considerable degree, impeded the mining industry of the different states, as the demand for metal of every description is, on the contrary, on the increase, and the miners in full work, as well as the majority of the furnaces, and the rich gold mines of Russia, in the Altai and Ural Mountains, and Siberia, by the Government, at excellent pay, and many other privileges to those in the latter, which they little expected, or ever could have hoped for, from the authorities, or the autocrat. In Austria and Sweden, the greatest impetus is now also given to mining operations, although the political state of both may be said not the most cheering to enterprise. In no instance have the miners in either of the above countries taken any part in the passing events, which have caused so great a depression to every other portion of the working classes, and the general trade and resources of the country.

EXPERIMENTS ON COAL.—OFFICIAL REPORT.—No. VI.

Comparison between the Effects produced by the Boilers at Par Consols Mine, and those obtained from that employed for the purposes of the Investigation.

A large amount of facts relative to the evaporative powers of various coals having been amassed during the progress of this inquiry, it was thought desirable to ascertain how nearly these results approach the maximum duty obtained from Cornish boilers, and thus furnish a means of comparison between the apparatus employed for the purpose of this investigation, and larger boilers, of similar construction, as used for practical purposes. Experiments have at different times been made, in order to ascertain, with accuracy, the quantity of water which can, under the most favourable circumstances, be evaporated from a given temperature, by the combustion of 1 lb. of coal.

No very decisive results appear, however, to have been arrived at; as, on consulting those of the different experimentalists, considerable differences will be observed. Smeaton, who seems to have been the first to pay serious attention to this subject, found, in the year 1772, that 1 lb. of Newcastle coal evaporated 7.88 lbs. of water from 212°. Watt, who turned his attention to this subject in the year 1788, arrived at the conclusion that 8.62 lbs. of water might be evaporated from the temperature of 212° by 1 lb. of the coal employed in his experiments; whilst Mr. Wicksteed, in the year 1840, found that 1 lb. of Merthyr coal could be made to evaporate 9.493 lbs. of water from the temperature of 80° Fahr., which is equal to the evaporation of 10.746 lbs. from the temperature of 212°.

Some experiments were also made, about this time, on the boilers of Llan's engine, at the United Mines in Cornwall, to which was adapted an apparatus which correctly measured the quantity of water injected into the boilers. The experiment was continued six months; and, during that time, it was found that 234,210 cubic ft. of water, at the temperature of 102° Fahr., had been pumped into the boiler, and that 700 tons of coal had been consumed in its evaporation; thus showing, that 15 cubic ft. of water, at 212°, had been evaporated for each 100 lbs. of coals used; or that each pound of coals consumed had evaporated 10.29 lbs. of water from the temperature of 212° Fahr.

It will be observed, that these results not only differ considerably from each other, but also that no means were employed for the purpose of ascertaining the chemical composition of the various coals used, which should, we conceive, form an important part of all such investigations. In order, therefore, to obviate this inconvenience, as well as to take advantage of such improvements as may have been introduced since the dates of the foregoing experiments, it was determined to make a similar inquiry into the evaporative powers of the boilers of one of the best Cornish engines of the present day. That chosen for this purpose, was the large pumping-engine at Par Consols Mine, where every facility was afforded by Mr. West, the engineer, for carrying on the experiments effectually. This engine is an 80, with a 12-ft. stroke in the cylinder, and is worked by two boilers, to which is added an arrangement, by which the feed-water is heated to near the boiling point before entering the boiler. This is effected by means of the waste heat escaping from the flues; and the apparatus consists of two wrought-iron tubes, each about 20 in. diameter, placed above each other, and parallel to the axis of the boilers, in the brickwork of which they are inclosed. The feed-water is pumped into the upper tube by means of the usual arrangements, and then descends through a pipe into the lower one, from whence it passes into the boiler itself. Both these tubes are exposed in their whole length to the action of the heated gases coming from the fires, which, after having made the circuit of the boilers, pass round the warming tubes before arriving at the base of the chimney; the water in the tubes is thus heated to about 212° by means of the heat absorbed from the gases passing through the flues, and of which the temperature is reduced to about 300° by the time they arrive at the base of the chimney. Our experiments were conducted in the following manner:—

It was first necessary to be enabled to measure with accuracy the quantity of water supplied to the boilers; and, in order to effect this, a large cistern was placed near the air-pump, from the bottom of which it could, by a simple arrangement, be filled with water. The connecting-pipe between the feed-pump and air-pump cistern was then removed, and a pipe fitted to the feed-pump, which reached the bottom of the reservoir. The cistern was also provided with a waste-pipe, which prevented its being filled beyond a certain point; it was then filled with water and pumped out, in order to ascertain at what level the pump ceased to act. This point being decided, water was weighed into the cistern until it reached the level of the waste-pipe before mentioned, when it was found to contain 1260 lbs. It was also necessary to be enabled to stop the action of the feed-pump during the filling up of the cistern; and this was accomplished by means of a stop-cock placed in the feed-pump immediately under the stuffing-box, which, when opened, let in air and prevented the formation of a vacuum. The measurement of the injected water was thus rendered excessively easy, as it was only necessary to count the cisterns pumped into the boilers, and open the stop-cock whilst it was being filled, in order to do so with accuracy.

The arrangements for measuring the water having been completed, the experiment was begun; and, at the expiration of 46½ hours, it was found that 95 cisterns of water had passed into the boiler, and that 11,730 lbs. of coal had been consumed; or, in other words, that 11,730 lbs. of coal had been consumed in order to evaporate 119,700 lbs. of water from the temperature of 92° Fahr., which gives 10.204 lbs. of water evaporated from that temperature for every pound of coal consumed. If, as in the former part of this report, we take 212° as the standard temperature, we find that each pound of coal employed had evaporated 11.428 lbs. of water from the boiling point.

The combustible employed during this experiment consisted of a mixture of Swansea and Bury coal; but, in what proportion, or from what pits, we were unable to learn. An analysis of the mixture was, however, made by my colleague, Mr. H. How, who obtained the following results:—

Carbon	84.19	Nitrogen	0.80
Hydrogen	4.19	Ash	8.06
Oxygen	0.86	Sulphur	1.90=100.0

These coals were also found to contain 6 per cent. of water, the greater portion of which had been intentionally added, for the purpose of communicating intensity to the heat obtained during their combustion. Having now ascertained the quantity of water evaporated by 1 lb. of coals, as well as the composition of the coal employed, it remains to institute a comparison between the evaporative capacity of the boilers experimented on, and that employed for the purposes of this inquiry. In order to have done this, it would have been desirable to have made a comparative experiment with the same coal when consumed in the latter boiler; but, as circumstances prevented this from being done, we may obtain nearly the same results by consulting the table of analyses, and selecting a coal having as nearly as possible the same composition as that in question. If we compare the following analyses, it will be found that the Mynydd Newydd coals are so similar in their composition to those used in the Cornish experiment, as to be considered practically identical:—

Carbon	84.20	Mynydd Newydd	84.19
Hydrogen	5.1	.....	4.19
Ash	3.25	.....	8.06
Sulphur	1.21	.....	1.90
Nitrogen	1.56	.....	0.80
Oxygen	3.52=100.00	.....	0.86=100.00

The practical trial made on the Mynydd Newydd coal in the experimental boiler, gave 9.92 as its evaporative value; if, then, we assume that the two coals possessed equal calorific powers, the evaporative values of the two boilers will evidently be as 9.92 is to 11.42; or, in other words, the Cornish boiler will possess a superiority of nearly 20 per cent. over that used for the purposes of the investigation. Assuming, then, the economic quality of these two coals, we have only to multiply the results obtained by the various coals during our own experiments by 1.1995, in order to ascertain their several evaporative values if consumed under the Cornish boilers.

The following table has been calculated upon this assumption, and should, therefore, be considered only as an approximation.

Name of coal.	Admiralty boiler.	Cornish boiler.
Mynydd Newydd	9.52	11.42
Graigola	9.35	11.21
Anthracite (Jones and Aubrey)	8.46	11.34
Old Castle Flery Vein	8.54	10.72
Ward's Flery Vein	9.40	11.27
Binea	9.94	11.99
Llangennech	8.86	10.62
Pentriph	8.72	10.46
Pentrefelin	6.26	7.62
Powell's Duffryn	10.149	12.17
Three-quarter Rock Vein	8.84	10.60
Cwm Ffrod Rock Vein	8.70	10.43
Cwm Nanty-Gro	8.42	10.10
Resolven	9.53	11.43
Pontypool	7.47	8.96
Bedwas	9.79	11.74
Ebbw Vale	10.21	12.24
Portmahar	7.53	9.03
Dalketh Jewel Seam	7.08	8.49
Coronation Seam	7.71	9.24
W's End Elgin	8.45	10.14
Fordel Split	7.66	9.06
Grangemouth	7.40	8.87
Colehill	8.00	9.59
Broomhill	7.30	8.75
Lydney	8.52	10.22
Silverdagh (Irish)	9.85	11.81
Wylton's Patent Fuel	10.92	12.70
Warlick's	10.36	12.43
Bell's	8.53	10.23

* The boilers on which this experiment was made are each 32 ft. in length, and 6 ft. 3 in. in diameter. Each boiler presents a heating surface of 930 square ft., and the warming apparatus offers a surface of 560 square ft. to the action of the heated gases.

† We took care to assure ourselves, by means of the gauges, that the boiler contained the same quantity of water at the beginning and close of the experiment.

‡ The Mynydd Newydd coals, of which we have no loss of heat, is capable of evaporating 14.90 lbs. of water, and the Welsh coal, used in Cornwall, 14.28 lbs.; but, considering that this heat cannot all be obtained in practice, these economic values for calculation might be taken as equal, without introducing any serious error.

OAK FARM IRON-WORKS, KINGSWINFORD.—We are gratified to learn, that at a meeting of the creditors of Messrs. Paterson, Walker, Boydell, and Roper, on Thursday, a service of plate, valued at about 300l., was presented to Mr. Boydell by the nobility and gentry of North Wales (together with a purse of 400 guineas), as a testimonial of the esteem he enjoyed in that locality prior to his removal to his late works, it was agreed should be returned to that gentleman—who, it appeared, had been thought worthy of it, for the great ability he had displayed in his efforts to improve that district. In addition to this testimonial—among the subscribers to which were the Marquis of Westminster and the Hon. E. Molyneux—another service of plate, presented at the same time, by the humbler classes of society in that district, and which cost 200l., was also returned to Mr. Boydell.

THE CONWAY TUBE.—This immense tube, weighing 1300 tons, was raised 14 ft. on Monday morning last, during a storm of hail. Only 10 men were employed during the operation, and the presses were found to answer admirably—the rising was at the rate of 12 ft. per hour; and the operations were superintended by Mr. E. Clark, the assistant engineer to Mr. H. Stephenson, at Conway. We understand that a party of the directors, and their friends, intend to accompany the first train which is to pass through this extraordinary bridge on Tuesday next.

NOVEL METHOD OF CONSTRUCTING LOCOMOTIVE ENGINES.

An entirely new idea—and one which, if carried into effect, will produce a revolution in the principal of the locomotive—has been started by Mr. Gaspard Cipri, surveyor of the Paris and Orleans Railway, and which he terms the *hydro-electric process, for feeding the combustion in the fire-places of locomotives and steam-engines*. Having long been aware of the enormous loss of heat in the locomotive as at present constructed, he studied carefully the necessary means of preventing this, and found, by the aid of a very simple process, that all combustion can be fed by the vapour of water, in place of the air of the atmosphere; and the following are the scientific facts on which his principle is based:—1. The difference between the vapours and the gases have been falsely given, for a long time, by the facts constantly exhibited in the physical sciences. Thus, the bodies which are present in the state of gas, are the bodies in a state of vapour, and vice versa.—2. The vapour of water, or rather the gas of water, arising from two volumes of hydrogen and one volume of oxygen, is a fluid which powerfully develops combustion, either by its chemical properties, or by the proportion of volume in which the mixtures of the two gases are present, which form the vapour of water.—3. The vapour of water, in coming into contact with electricity, undergoes almost a disjunction, or a repulsion, between the two gases which compose it. By an unknown cause, this repulsion between the elements of the vapour of water is almost necessary, in order that this same vapour might become a powerful supporter of combustion.—4. Ignition, or the flame which arises from the combustion of a body, is an electrical phenomenon.

To carry out these principles, he proposes to construct his boiler and fire-grate in such manner, that a current of steam can be passed underneath the grating, and the communication with the atmosphere be cut off after first lighting the fire; when the combustion will be fully supported, and much greater heat developed. He considers the following advantages will be obtained:—1. No tender is required.—2. The fire-place is in the centre of the liquid mass, which it is required to quickly heat.—3. The boiler, with all its heated surfaces, is placed between the fire-place and the warm water, which serves to supply it.—4. The water, which supplies the wants of the boiler, by surrounding these heated surfaces, completely absorbs the caloric, which, in the locomotives in actual use, is lost in the air.—5. No firemen are required.

He also proposes to use coal instead of coke, and all the gaseous products to mix with the steam, and be condensed in a reservoir which surrounds the boiler, and supplies it; while the volatile oils contained in this fuel form a useful greasing substance to the moving parts. From the application of the smoke and gaseous products of combustion as a moving power, he assumes the following advantages:—1. The employment of the tension of the smoke and the gaseous products of combustion, so that they mix with the steam, and assist to put into movement the engine by means of their tensile force.—2. Economical employment of all the heat, which, in the locomotives at present in use, once developed, passes off in complete loss in the air, by passing through the sides of the fire-place and the tubes.—3. Suppression of chimney—whence it follows, that tunnels and bridges might be constructed of less height, and at, therefore, a diminished cost.—4. It becomes impossible for the tubes of the boiler to be stopped up.—The inventor considers his new system produces a saving of at least one-third of expense over that at present in use.

THE WICKSTEED ENGINE.—Mr. Wicksteed was the first to introduce the Cornish engine into the metropolis, and he deserves great credit for his exertions. The first engine was put up about ten years ago; the second, which is larger, is named the Wicksteed engine, and is erected at the East London Water-Works. It was started to supply water to that company's district in June, 1847, and is the largest engine hitherto erected in London; it was designed by Mr. Wicksteed, who is engineer to the company, and was erected under his superintendence. It was manufactured by Messrs. Sandys, Carne, and Vivian, of Copperhouse Foundry, Hayle, Cornwall. The diameter of the cylinder is 90 in., the diameter of the pump 44 in., length of stroke 11 ft., and it pumps 20 imperial barrels at each stroke. When working at the rate of eight strokes per minute, it raises 5792 gallons per minute, or 8,340,480 gallons per diem, or 84,563,200 barrels per annum. The power when working at this speed is 240-horse-power. The main beam is 39 ft. long, and weighs 39 tons; it vibrates on a cast-iron main gudgeon, 16 in. diameter, and the whole is supported by four columns, and an entablature of cast-iron, designed in the Grecian-Doric style. The plunger, with its appendages, weighs 45 tons, which mass of matter is raised 11 ft. high at each stroke of the engine. The pump-work is supported by two iron girders, weighing each 10 tons, and is strongly bolted down to a mass of masonry in the foundations. The boilers, four in number, are cylindrical, 34 ft. long, 6 ft. 6 in. diameter, with an internal fire-tube 4 ft. in diameter. The diameter of the steam-pipe is 16 in. The total weight of the engines, pumpwork, and boiler, is 414 tons, and the whole cost was 10,000l., or 50l. per horse-power, or working at full power night and day, would be 2000 tons per annum, and the quantity of coals that would be consumed by the heat of the ordinary non-expansive engines in doing the same work would be 4500 tons; showing a saving in favour of the Cornish engine of 2500 tons, which, at 13s. per ton, is 1625l. per annum, or 16½ per cent. upon the cost of the engine for coals only.

IRISH STEAM-ENGINES.—We last week stated, that the largest steam-engine ever made in Ireland was being shipped at Belfast for the Pacha of Egypt. It is, we learn, one of a number intended to be erected on the banks of the Nile, for pumping water to irrigate the land; the cylinder is 62 in. diameter, with a 10-ft. stroke; and the pump will throw up 10,000 gallons of water per minute. The makers of the engine are Messrs. McAdam, Brothers, and Co., of the Soho Foundry, Belfast.

THE COPPER MINERS' COMPANY.—In reference to the recent trial, at the Gloucester assizes, Wood v. the Governor and Company of Copper Miners of England—an incorrect report of which having appeared in some of the local papers—the plaintiff (H. W. Wood, of Briton Ferry) offers the following explanation:—"The differences which have arisen between the Copper Company and myself are founded upon the non-fulfilment of a contract for the supply to me of 500 tons weekly of unscreened small coal, good, and fit for the purpose of making fuel; or, if screened, the longitudinal bars of such screen to be not less than four inches apart. This has not been complied with, and to this breach the company have demurred, contending that the wording of the contract does not obligate them to send any coal at all. The second breach arises upon another clause in the same agreement, whereby the company have bound themselves, after receiving 14 days' notice in writing, to remove and to replace all such coal as will not pass through a smaller screen, having longitudinal bars only half an inch apart, under a penalty of 2l. per day, and to pay an additional price for whatever rubble coal this process produces. The stipulations under this clause have not been complied with. The damages under both breaches of the covenant are very serious, and a verdict is recorded for the plaintiff, subject to the legal construction of the contract, and leaving the damages to be assessed by the referee. I can only add, that my outlay for buildings, machinery, and other incidental and unavoidable heavy expenses, to introduce a new material, has more than 20 times exceeded the small amount of 500l., which you name in your report of the case; an outlay altogether incurred upon the faith of a contract bearing the common seal of the incorporation, and believed to be a good and valid contract; otherwise I should certainly not have expended so much money in a locality inaccessible to all other sources of supply. Evidently, it must be either 'a contract,' or 'a fraud'; I contend the former, knowing personally many gentlemen of the company to be quite incapable of the latter."

CAMERON'S COALBROOK STEAM COAL COMPANY.—A case of considerable importance came before the Quarter Sessions for the county of Carmarthen, last week, in which this company is involved. Mr. HOWDEX (the secretary) appeared, and stated the case on behalf of the company. It appears that, in 1841, under the Kidwelly Trust Act, the trustees were authorised to widen the Loughor-bridge, and lay down rails for this company. This was done; and, in 1844, an Act for consolidating turnpike trusts was passed, giving power to the county of Carmarthen to repair the bridge when necessary, and to take up the rails for that purpose. The bridge was repaired; but the rails had not been relaid, and were now lying at Spitty Bank, near the bridge. He contended the county had no right entirely to remove the rails which were laid down, under the Act 2d Will. IV., c. 29, although he acknowledged the right to repair. This company had obtained counsel's opinion, which was, that the county was bound to lay down the rails. The company had no objection to bear the expense, or to pay a reasonable sum per annum, to form an accumulative fund to keep the bridge in repair; they only intended to use horses, so that no damage could accrue. The principal objection appeared to be that, on the representation of Col. Cameron, and a pledge that a large annual revenue would arise, the Kidwelly trust had expended 1500l. in widening the bridge and laying down the rails. Instead of a large income, however, not a single wagon had passed over them; nor had a single payment been made.—Considerable discussion ensued; and it was at length resolved, that the application be referred to the Loughor-bridge committee; and that they have power to refer to the Glamorganshire committee, take counsel's opinion upon a case, to be drawn up by the clerk of the peace, and report to the next committee.

THE COAL-FIELDS IN ENGLAND AND WALES.—A Russian correspondent in the *Chercher Chronicle*, signing himself "Asbestos," says, that the North Wales coal field, measuring from the point of Ayr, in Flintshire, to a few miles beyond Oswestry, in Shropshire, covers an area of 200 square miles, of 10 yards in thickness. The weight of a cubic yard of compact coal is 19 cwt. 16 lb. The total weight of the coal in this extensive area will thus be 6,928,000,000 tons. These coals, at 6s. per ton, at the pit-mouth, would produce 1,778,000,000l. To exhaust this field it would require that 2,000,000 tons be worked annually for nearly 300 years. The extent of the other coal-fields in England and South Wales, estimated at the same thickness as the North Wales field, would yield 177,880,700,000 tons, which would furnish us with 40,000,000 tons of coals for nearly 4000 years.

Original Correspondence.

MINING IN SPAIN.

SIR.—Having observed that for many months your attention has not been drawn to this country, you may not consider the following remarks entirely devoid of interest. The northern coast of Spain chiefly occupied with mining is the Asturias, which may be divided into three important districts—first, that of Cabrales, for copper; secondly, that of Langreo, for coal; and, lastly, Trubia Mieres and La Pola de Lena, for quicksilver and iron: each appears to have its future prospects and objects exactly defined. Beginning, therefore, with the first—it is undoubtedly the only district where copper has been worked with any success; and the sales at Swansea of the 16th ult. show that 43 tons, being the produce of the first shipment, realised 511*l.*, quite a new feature in the English markets. The quality of the ore is grey sulphuret, containing silver, although apparently too insignificant in quantity to render it valuable for that metal. About 300 tons remain in warehouses from one mine alone, a second cargo of which is being prepared for shipment—the cleaning requiring great care, owing to the land carriage to the coast costing 20*s.* per ton. The ore is found in kills, and the general country limestone, with coal measures in the neighbourhood, although neither the quality nor quantity render them serviceable for smelting, particularly with charcoal of excellent quality, at 16*s.* per ton. Advantage is about to be taken of the unlimited water-power, to erect, at the base of the mountain, in which is situated the principal mine, smelting-works, as the law of Spain prohibits the exportation of ore, and it is only as a special favour that permission to export it is granted. There are six mines, more or less, worked by this company; and although none can be said to possess decidedly regular lodes, yet the pockets are extremely rich, many of the stones weighing several hundred weights, yielding 18 to 20 per cent.—one pocket alone having already produced 400 tons, with every certainty of at least as much more being in sight; preparations are being made to give them a fair trial on a large scale this year—thus an interesting problem will be solved, as to whether that district of Asturias can be ranked permanently as a copper country. The shafts, galleries, and outworks, give the spot a more legitimate appearance than is noticeable in Spanish undertakings, which is mainly due to the zeal, intelligence, and untiring activity of Capt. Thomas Roskew, late of Cornwall; the property belongs to a Spanish company, formed at Madrid, called the "Cantabria," or Cantabrian Mining Association—the brother of the present Minister of Finance is the principal shareholder, although some shares are held in England.

The second district, or Langreo, situated on the river Nalon, forms the centre of the Great Asturian coal basin, and is, undoubtedly, destined to supply a considerable portion of foreign markets. There are two leading companies—one originally started by Senor Aguado, Marquis of Las Marismas, now the property of the Duke of Rianzares, and is a private undertaking; the other is the Cantabrian already spoken of, having a nominal capital of 100,000*l.*, of which, however, only 10,000*l.* is paid up, and represented by 2500 shares, of 4*l.* each; a second emission of a similar amount is to take place, for the purpose of making a tramroad. All the pits, galleries, shops, and other works, are completed, being ready to supply any demand; and, in order to make the concern as complete as possible, a grant has been obtained, which will enable the company to make a tramroad to connect all the mines (about 40 in number) together, and run down to the railway. The total number of seams, varying from 2 ft. to 12 ft., already discovered, amounts to 80; or rather, I should say that, as the property is intersected by a river, the seams are repeated on both sides—so that, more correctly speaking, there are 40 in a vertical stratification of sandstone. The present sale is limited, owing to the expense and difficulty of carrying the coal to the coast, a distance of 22 miles, which has induced the parties interested in the above two companies to form a separate one, with a capital of 200,000*l.*, for the purpose of making a railway to the coast. The surveys were completed early last year, and the works commenced under the direction of a Spanish engineer, during the summer, since which time the most extraordinary energy has been displayed—so much so, that either this winter, or early next spring, two-thirds of the distance will be opened, the greater part of the earthwork being completed, and the bridges above water, or entirely arched over. That such activity should be displayed by a Spanish company is the more remarkable, as they are justly accused of indifference and apathy; but their business-like conduct on the present occasion is, perhaps, in part owing to several of the committee having been for many years emigrants in England, and the more prominent part being under the management of Dr. Emilio Sancho, so well known in London for his official discharge of the onerous duties of President of the Spanish Financial Commission; such good management, and the *bona fide* nature of the undertaking, gives the greatest possible confidence in its success, and has enabled it to ride through the storm that has wrecked nearly every company started off in Spain. It is impossible to doubt the important commercial results that await Spain on the completion of this work—it is, therefore, not astonishing that the Government has brought forward a bill, guaranteeing to this and similar lines a minimum of interest of 6 per cent. until they are open—consequently, the greatest activity must soon develop itself in Asturias. Coal at the pit's mouth costs the miner 3*s.* 6*d.* per ton; the railway which, owing to special privileges, will not cost 200,000*l.*, will carry the coal to the coast for 2*s.* 6*d.*, leaving for itself a large profit; and, lastly, the shipping of all nations is equally favoured in Spanish ports for loading coal; the very best quality screened will thus be sold on board at 6*s.* per ton, exclusive of such profit as the miners are fairly entitled to. For the present, a beautiful turnpike-road, made by the late Marquis of Aguado, starts from Sama, the market town equidistant from the mines of the two companies, and enables the countrymen, when they have no other employment for the cattle, to carry coal to the coast; by such means of carriage the exports from Gijon, the port to which the railway is being made, must naturally be limited, and amounts to about 40,000 tons. I have not alluded to the coal mines of the Asturian Mining Company, at Mieres, and those under the management of Mr. Paillette, a distinguished French engineer, they being from seven to ten miles further from the coast, without as yet any prospect of a railway—therefore, they are not likely to become coal exporters; nevertheless, they possess excellent seams, the produce of which will be required for the blast-furnaces, and other metallurgical establishments rising in that district, which I will describe in my next.

Madrid, April 3.

A CONSTANT READER.

ANTHRACITE COAL.

SIR.—As anthracite coal, owing to its being free from smoke in combustion, is highly desirable as a fuel for the use of marine and locomotive engines, it has had, therefore, the attention of scientific and practical men for several years; but either their researches, or inventions, have proved a failure—or, if any has partially succeeded, it has been attended with additional care on the part of the consumer; when that is the case we often see really good inventions thrown aside, under the familiar term of "failures." The first locomotive engine, manufactured with the view of burning anthracite fuel, was built by the Llanelly Railway and Dock Company in 1842 and 1843, under the direction and superintendence of Mr. William Veran, a Cornish engineer, which turned out a complete failure. The engine was called the *Prince of Wales*. It was again rebuilt, and worked with coke for some time, until the coalowners in the Cwm Ammon and Swansea Valley expressed a wish to have another trial of the anthracite coal; and showing to the directors the advantages arising therefrom to their traffic by an increased consumption—and, consequently, an increase in tolls might be expected—the directors again boldly came forward, and offered their engine for alteration (the same engine, the *Prince of Wales*), and which at the time required extensive repairs. They then instructed Mr. William Stubbs, a north country engineer, to carry out his views in the alteration of the engine, so as to burn anthracite coal. After the necessary lapse of time, which was somewhat long, for the repairs and alterations, the *Prince of Wales* was again brought out as a stone coal engine; but, after repeated unsuccessful trials with that coal, it was abandoned, and the *Prince of Wales* was again a coke engine. Some time again elapsed, when the Llanelly Railway and Dock Company had another locomotive engine requiring extensive boiler repairs. Permission was then given by the directors, and the alterations were made, under the direction of Mr. John Rogers, a Welch engineer; but, like the previous experiments, it was again a failure, and the engine is now using coke. There is one observation I may here make, which may, in some measure, account for those failures—namely, in making the alterations, the engineer had to construct the boiler, or fire-place, in such a way, that, should they not succeed in the use of stone coal, they would be able to burn coke. This, in my opinion, may be the principal reason of the whole of the failures; but that can only be decided when we have more knowledge on the subject than we at present possess. Mr. Veran's boiler was leaky and

bad; the whole of the workmanship was of an inferior kind—locomotive making at that period being little understood in Wales—but he had great heating surface, and used a double fire—one in his tube, and one underneath his boiler outside. Stubbs's plan I am not so well acquainted with—and I do not think it was entirely carried out; he had his fire in a longitudinal tube, the bottom of which was perforated with holes underneath the fire-grates; the outer and inner tubes were connected with small tubes. The front of his fire was filled with holes in a similar manner, to give a quantity of air for combustion. Mr. Rogers's plan was very similar to that of Mr. Stubbs's—the difference consisting in the former having a square fire-box, with similar holes front and back of his fire-box.

This brings us up to the most recent experiments with anthracite in locomotives; but, during the experiments with locomotives, there has been a more successful step taken with respect to the use of anthracite in permanent and marine engines. This was due to Mr. Kymer, of London, under the management and superintendence of Mr. Leighton—a very scientific and persevering gentleman.

Descriptions of Messrs. Kymer and Leighton's patent, and an account of the trial in one of her Majesty's steam-vessels, which failed, owing to the imperfect construction of some of the machinery of the fanning apparatus, was given in the *Mining Journal* at the period when it took place. Notwithstanding the many trials and failures which have been made, I think the object ought not to be abandoned; and, when the South Wales Railway Company become more interested in this district, it is to be hoped they will use their influence in investigating the merits of anthracite.

Llanelly, April 10.

A RESIDENT.

ON CUPELLATION.

SIR.—Your correspondent, Dr. Murray, states, in the *Journal* of the 8th inst., that he has found the cupel will absorb portions of the precious metal, and that this fact should not be overlooked in the estimate by assay. I can confirm Dr. Murray's statement, and have already alluded to it in my *Manual of Assaying*. I find, however, that the quantity thus lost can be reduced to an almost inappreciable amount, by employing very finely pulverised bone ash—for the quantity of silver or gold lost is in proportion to the coarseness of texture of the cupel. The greatest amount of loss in silver assays occurs from the oxidation of a portion of the metal; this it seems cannot be avoided.—JOHN MITCHELL: Hawley-road, Kentish Town, April 10.

ON THE FORMATION OF COAL.

SIR.—There are few matters connected with geology which have attracted so much of the investigator's attention as the natural formation of coal. The various conflicting opinions as to this important subject will doubtless suffice, as reason enough, for my offering some observations deduced from my own practical experience.

Geologists are generally unanimous as to the fundamental origin of coal—namely, that it arises from a deposition of arborescent and other vegetable organism, which have been drifted from the parent soil whereon they had grown, and subsequently attained a state of perfect quiescence at the bottom of seas and lakes, where they have been gradually converted into coal beds. How far this theory is to be trusted, may be judged from the following observed phenomena:—In the first place, I have invariably found that the arborescent deposits occur promiscuously, and are imbedded at all angles in the strata, yet I have never found any that was metamorphosed into coal. On the contrary, the matter has undergone a complete decomposition in the interior of the trees, leaving a mould which has been substituted, with a cast infiltrated from the material (generally of a sandstone or argillaceous composition) with which they are associated. The only portion of the tree which has become coal is the outward coating, or bark. Again, I have extracted a number of specimens, more especially of the genus *Lepidodendron*, from the very heart of one of our coal seams at present being excavated. The internal portions of these trees are composed entirely of sandstone, which forms the immediate superincumbent roof of the coal seam. Now, under these circumstances, I shall hardly be thought unreasonable in begging for a solution of these phenomena, from those parties who hold the opinion, that the interior woody or fibrous texture of trees had become coal. Why is it that the trees, whether found in the coal bed or intermediate strata, have not become coal? Certainly, if they have not had the same chemical action to influence their conversion into coal, in the general strata, they have at least had an opportunity in the heart of the coal seam.—T. ROBERTSON: Halbeath Colliery.

YORKSHIRE COAL WORKINGS.

SIR.—It was not so much my intention to show the mode of working a coal mine, as to show the right way of ventilating one—well knowing that the mode of working, in a great measure, depends upon the thickness of the seam, inclination of the bed, and nature of the roof, &c. My principle of ventilation will warrant itself in all coal mines, however the workings may be found to vary from each other. Mr. Deakin says, he should have liked to have seen a scale affixed to my plan of workings; my reason for not doing so was, that I leave the breadth of the main workings to be determined by the manager—but will just say, that the board-gates, or double air-courses, in the mine I superintend, are about 70 yards apart. I have no objection to their being carried double the distance apart from each other, if found practicable. I have seen mines which might have been worked to almost any extent in breadth, where the refuse fills up the gobbin. The bed of coal we are working is from 9 ft. to 10 ft. thick, with an elevation of 1 in 12, and nearly all the refuse sent out. The slits, or side openings, on my sketch are only to show the plan of working; and, with regard to their number, or distance, that would be best determined by the nature of the mine. I offer no objection to Mr. Deakin's mode of working, as shown on his sketch, but should have been glad if he had named the thickness of the coal bed, and its inclination. I think his principle of ventilation is much the same as that I practise; it is true his air-courses differ from mine—a circumstance which can be easily accounted for by the thickness of the bed, the nature of the roof, &c. I only feel somewhat surprised that Mr. Deakin fixes his furnaces at the foot of the coal drawing pit—a plan, I must say, I am decidedly opposed to; where-ever it is necessary to have furnaces in the bottom of a mine, it is the interest of every coalmaster to have a cupola pit set apart for the use of the said furnaces.—J. C. SUTCLIFFE: Gaucha Colliery, Barnsley, April 12.

STEAM BORING-MACHINE.

SIR.—The steam-engine has, in many mining operations, superseded manual and animal labour; but I have not yet seen, nor do I think it has been much used in mineral boring generally. The double-brace head, the spring-pole, or the break, or lever, as in the beginning, even until now, have been, and are still working, after the good old fashion. Nasmyth's direct-action engine has been applied to forge hammers, to piling-engines, and why not to boring? The usual method of boring, as most of your mining readers well know, is by iron rods, about 1½ in. square, screwed into each other, in about 4 ft. lengths. To the lower end is fixed the chisel, and on the top a "brace-head," with four arms springing from the centre, about 2 ft. long each. Four men generally work the rods, moving slowly round each stroke, to make the hole round. The rods are lifted with a windlass, when the hole requires cleaning, &c. When the bore is 10 or 15 fms. deep, a spring-pole, or generally a lever, is put on. This lever is generally about 20 ft. long, and the lever power as six to one, or thereby, and to the end of it is attached (by a rope or chain) the rods. On the other end, three or four men work it up and down—the master borer guiding the rods at the top of the hole. The number of strokes is from 15 to 20 in the minute—the rods being lifted about 8 in. each stroke; and, as the bore gets deeper, they are less—thus making the operation slow, and very expensive. What I propose, is to have a small portable boiler, constructed something after the principle of the locomotive boiler, with tubes, and fired inside; and attached to this a steam cylinder (on Nasmyth's steam-hammer principle), to the piston-rods of which the rods are to be connected. A winding-drum, to be wrought by the engine, and disconnected when not needed, will draw the rods for the purpose of cleaning the hole, shifting chisels, &c.; or, if the Frenchman's system of boring with tubular rods, and forcing up the borings with water, were adopted, nothing could fit better than to attach a force-pump to the piston-rod, and both would work together. A machine of this kind, with an 8 in. steam cylinder (the stroke might be 6 in., or more, if necessary; and any one who has seen Nasmyth's steam-hammer going, will understand how gently the rod might be dropped), would, with a pressure of 40 lbs. on the square inch, easily work 60 fms. of rods 100 strokes a minute; and all the attendance needed would be a man and a boy, to guide the rods and watch the machine. This rude idea may set some of your ingenious correspondents a thinking, who may approve, improve, or condemn. To be serviceable is the only wish of your obedient servant,

Blaenavon, April 11.

STEAM.

SIMS'S SUBSTITUTE FOR HORIZONTAL RODS.

SIR.—For the information of your readers who may feel interested in the success of the plan, proposed by Mr. Sims, of substituting water in a close pipe for the horizontal rods now used underground for draining parts of a mine distant from the engine, I beg to state, that the plan, or rather a modification of it, is perfectly practicable. This I am enabled to state with confidence, after having had nearly 20 years' experience in the working of a machine of this description—I allude to a machine which I thought had been more generally known, constructed from the designs of the late Mr. Arthur Woolf, nearly 20 years ago, for Messrs. Bolitho and Co.'s tan-yard at Penzance, in Cornwall, where it has been satisfactorily doing duty ever since. Messrs. Bolitho and Co. having at the time a water-wheel of surplus power on premises at a distance, it was desirable to apply that power to the working of pumps in the tan-yard. Mr. Woolf was consulted as to the best mode of effecting their object; and he proposed to apply two open top cylinders, fitted with pistons—one placed near, and worked by a crank motion from the water-wheel; the other placed in the tan-pit yard; and the communication of motion between the two pistons to be made through the aid of water in a close pipe. The expansion and contraction of the water under a variable temperature, as well as the trifling leakages by the pistons, &c., was at first provided for by air compensation valves; air under the piston, however, was found to be very objectionable, and changed for water, which was used instead. We had some difficulty at first to get the compensating valves to act properly. I, subsequently, removed the cylinders from the machine, and placed plunger poles to work through stuffing-boxes instead of them, and also made some alterations to improve the valve gear; since which, the machine has continued working on, with very trifling repairs and attention, to the present day, and in a very satisfactory manner. It makes, when working at full speed, 25 strokes, of 2 ft. in length, per minute. The diameter of the plunger pole at the tan-yard end of the machine is 6 in., and it gives motion to two 7-in. pumps, which draw their water from a depth of 10 ft.; the pumps are arranged one on each side of the machine, and attached to the outer ends of a cross lead, fixed on to the top of the plunger.

Copperhouse Foundry, Hayle, Cornwall, April 13.

R. JENKYN.

OUR STEAM NAVY—NEGLECTED IMPROVEMENTS.

SIR.—On considering the altered position of contending navies in case of war, which the application of steam to such purposes is sure to introduce, it requires no prophet to predict the great superiority which that nation will possess that avails itself of the most improved and extensive application of such power. Hence the article you gave in your last week's *Mining Journal*, is, under present aspects, most opportune; for a steam navy, as you very justly remark, "though a permanent, it is not a stationary, force—its locomotive capacity is one of its leading recommendations." Such recommendations, with the other numerous advantages it possesses, render it obvious that the nation which provides itself with such means of defence, will act the most prudent part—the more especially so, if such advantages be enhanced by such improvements as will, with the least freight of coals and machinery, produce the greatest power and efficiency in the engines—at the same time, admitting of engines and boilers being placed below the water line, so as to protect them from the shot of the enemy; with the boilers, moreover, so constructed, as to be perfectly safe from ordinary explosions, and what is, perhaps, in this case, of more moment still, if struck by the shot of the enemy, no serious injury would ensue to the crew.

These, Sir, are all desiderata of the very first importance to naval tactics and to naval victory—providing, as they do, the means for outspeeding the enemy; or, owing to the more lavish consumption of coal, induced by the common system, the enemy relying on such system, would be brought to a dead stand for want of motive-power; or from the immense boilers necessitated on such a system, and containing, as they do, the enormous amount of explosive matter, which stand so far above the water line—liable, at every moment, by the enemy's shot, to be converted into the most destructive magazine, spreading desolation and dismay through the whole crew, if not sinking the vessel itself.

These, Sir—not to enumerate here further the many other advantages consequent upon such improvements—are assuredly of such transcendent importance in naval warfare, and point so decidedly to naval victory, as that, if it be not my own fault, I need not fear but other nations will afford me the encouragement which will put to flight the secret denunciations of those who, in these matters, are the Scribes and Pharisees of England, who, I am well aware, obstruct me at every point; and not a few of whose speeches and objections I would show the futility and unfairness of, would they have the courage to make them openly as men. But wily and prudent is the spirit which opposes me—fully alive are the men actuated by such spirit of the fact, that persecution, in our day, must avail itself of those weapons of warfare best adapted to the spirit of the age—the nature of the innovation, and circumstances and character of the innovator, whom, if they can, they are resolved to sacrifice at any cost to their country and to mankind. These men know full well, that if statements or principles are fallacious, or practical proof be wanting, that then their prudence does not shrink from putting down the innovator by public denunciation and exposure. But if all these are on the innovator's side, then they know their obstructive proceedings are most likely to be successful, and they (the actors) more concealed; whilst the inventor, bound by their invidious chains, finds himself placed in the anomalous position in which I have been constrained to appear in the opinion of those who, knowing what I have stated, and aware that I am not a wilful deceiver, consider it an insoluble problem, that, if one-tenth of the advantages of steam be really derivable from my inventions, engineers cannot be found to countenance or recommend it. How is it, they ask, that these men privately condemn it? Once for all, to such well-meaning sceptics I reply thus publicly, by asking them to read for themselves those numerous lessons of darkest dye which history presents on the treatment of those who have devoted their energies to services beneficial to the myriads of mankind; let them mark carefully how the spirit of persecution has, in all ages, adapted itself so as most effectually to crush individuals, and to rob mankind of the inestimable advantages such individuals have laboured incessantly to place at the command of humanity. If they will do this, perhaps they will discover why my position will not countenance or recommend it. How is it, they ask, that these men privately condemn it? 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IMPROVEMENTS IN LOCOMOTIVE ENGINES AND CARRIAGES.

[Specification of patent granted to James Pearson, of New Cross, engineer, for improvements in locomotive engines and carriages. Patent dated Oct. 7, 1847.]

The improvements, which form the subject of this patent, as set forth in the specification thereof, are illustrated by three sheets of drawings; but as the leading features of the invention are without complexity, the nature of these improvements may be thus briefly described:—The first of these improvements relates to the boilers of locomotive engines, and consists in arranging, or disposing, the fire-box about equidistant from each end of the boiler, instead of at one end, as usually practised. This is effected in the following manner:—

Two short locomotive boilers, of the construction hereafter described, are placed end to end, so that their fire-boxes abut against each other, and are in this position connected together, so as to form one long boiler; the fire-boxes thus brought together forming one common fire-box, having two doors for supplying fuel thereto, and the upper part serving as the foot-plate for the engine driver and stoker. The axle upon which the driving-wheels are fixed passes through the fire-box, and beneath the said foot-plate; and the trailing wheels, which are eight in number, are arranged or disposed in two swivel frames (4 in each frame), beneath the body of each short boiler, or each half of the long boiler, formed as above described—such swivel frames being for the purpose of allowing the framing of the engine and wheels to adapt themselves readily to the curvatures of the line of railway. This is effected by the following arrangement:—The swivel frames, which carry the travelling wheels, are connected together at their inner ends by tension rods, the extremities of which pass through lugs, or projections, fixed to, or formed upon, each of the swivel frames, such rods being connected thereto by nuts placed upon the screwed ends of the tension rods; and, in order that the frames thus connected together should possess flexibility, the patentee employs washers, composed of short cylinders of vulcanized India-rubber, or other elastic material, placed between said lugs and nuts. The steam chambers are situated at each end of that part of the boiler near the fire-box, and are connected together by a horizontal pipe, the top of each steam dome, or chamber, being furnished with a safety-valve, and each extremity of the boiler terminating in a chimney; one having an exhausting fan, or blower, placed therein, for the purpose of exhausting or drawing the heated air from the tubes of the boiler—such fan being worked by a cross strap, passing over a rigger on one of the trailing wheels, or in any other convenient manner. The patentee states, that by this peculiar arrangement of the fire-box, he is enabled to get the centre of gravity of the boiler very low. The drawings also exhibit coupled engines constructed on this principle—one of which shows an engine having two pairs of driving-wheels, and four pairs of trailing-wheels—the driving-wheels only being coupled. Another arrangement exhibits an engine having two driving-wheels, and eight trailing wheels, all of which are coupled together; and the same drawing shows the boiler as being constructed without a chimney, but having two fans—one at each extremity of the boiler, with a channel leading therefrom to the fire-box, for the purpose of exhausting the air from the tubes of the boiler, and returning the heated air again to the fire-box, if necessary. To carry the fuel and water necessary for the working of the engine, the patentee proposes to make use of the space by the foot-plate, and to employ outside cylinders, for imparting motion to the engine. The trailing wheels are furnished with breaks, which are under the control of the engine-driver.

Another part of these improvements relates to the construction of railway carriages, and consists in forming the framework with independent swivel frames, which are connected together by one or more tension rods, in a similar manner to that before mentioned, with respect to the construction of locomotive engines. In conclusion, the patentee states, that he does not claim the constructing of locomotive engines and carriages with bogies, or swivel frames; but what he claims is—the form of boiler, exhibited by the drawing annexed to, and forming part of, the specification (before described); secondly, the constructing of locomotive engines and carriages with bogies, or swivel frames, in combination with the rods, or connecting tension rods, and pieces of vulcanized India-rubber, or other elastic material, applied thereto, in the manner, and for the purposes, particularly described and set forth in the specification; thirdly, the application to the boilers of locomotive engines, of one or more exhausting or blast fans, for the purposes set forth; fourthly, the arrangements set forth and described, with reference to the construction of coupled engines.

Patent-office and Designs Registry, 210, Strand, April 13.

INDURATING BUILDING MATERIALS.

Our attention having been called to an advertisement in another column of Mr. Hutchinson's indurated stone, &c., we were induced to visit the office, and among the extraordinary discoveries of the present day, by which materials of the most humble pretensions in works of art are rendered of the utmost utility—the most refractory substances made to bend to the power of scientific research, and many productions, which have for ages been thrown away as useless, brought into most extensive usefulness—we know of none by which a more extraordinary, not to say magical metamorphosis is effected, than the operation patented by Mr. Wm. Hutchinson, by which plaster of Paris, Bath, Caen, and other soft stones, chalk, wood, pasteboard, and, in fact, any other material, is rendered hard as metal, receiving the most brilliant polish, and made absolutely imperishable from atmospheric action, vermin, &c. The purposes to which this patent can be applied are innumerable. The first idea of the patentee was the induration of the softer and more common, and almost useless, stones for the purposes of paving; but so complete was his success, that he soon took a loftier view; and has rendered the operation, not only applicable to all common purposes for which stones and slates are used in building—such as paving, both internal and external; window-sills, eusterns, fittings of dairies, &c.—but now applies the operation to all the higher works of art. Plaster of Paris casts, of the most elaborate designs, in busts, reliefs, architectural ornaments, fountains, and ornamental floorings for churches, trellis work for balconies, ornamental inkstands, &c., are rendered imperishable by the operation of the elements, and hard and tough as metal. Sculptors who may so choose, may work in Bath or Caen stone, or even chalk, and the production will be rendered superior to marble; and in all these operations the finest edges of the cuttings are preserved, and not a chisel mark is lost.

In inspecting specimens of Mr. Hutchinson's works, we were shown a slab, of a soft fine sandstone, from Tonbridge Wells—so soft, that it might be rubbed into powder by the hand—rendered hard as granite, and rung like a bell; numerous plaster of Paris ornaments and busts, metamorphosed into bronze, granite, and party-coloured marbles—drain, water, and gas pipes, made from Bath stone, chalk, or paper, hard as granite, and polished internally like marble; in fact, the results of the operations are most extraordinary. The water-pipes, and prepared sheets for roofing, will be found most economical, both in first cost and in wear and tear; in fact, they can be rendered at a cost which comes far below any other description of material which has yet been introduced for these purposes; the sheets would also be highly applicable for railways, and many other public engineering uses. We recommend the attention of engineers, architects, sculptors, builders, &c., to this interesting patent, which, we feel assured, will prove of great public utility. Mr. Hutchinson has also a model of a stone-sawing machine, which performs its work most perfectly by hand labour—entirely superseding steam machinery.

Works are already established in London, Caen in Normandy, and at Tonbridge-wells, in Kent. The patents, works, &c., are divided into 12 shares, of 3000*l.* each—two-thirds of the value to form the working capital, and the original proprietors retaining four shares. Parties will be treated with for the remaining eight shares.

REDGRAVE'S PATENT FIRE-ESCAPE.

As the protection of life against fire is a subject which cannot fail to interest all persons, more or less, we beg to lay before the readers of this Journal a brief description of a very ingenious self-acting apparatus, or fire-escape, intended to be placed beneath the windows of sleeping or other apartments, of dwelling-houses. This apparatus is arranged and disposed, as follows:—Near the sill of the window two brackets are securely fixed, and carry upon pins two levers, which constitute a folding skeleton frame-work, to which is affixed a canvas bag, rendered fire-proof by any of the known means; this apparatus, when folded up, is enclosed in a neat mahogany cupboard, which may serve as a toilette table; or, if in a sitting-room, may be formed to use the apparatus, in case of fire, it is only necessary to open the two halves of the cupboard upon their hinges, the first effect of which is to disengage a catch, and thereby to open the window—after which the pressure of two powerful springs against the before-mentioned levers has the effect of throwing the canvas bag out of the window, and places it instantaneously in a fit position for immediate use; and, in order to break the fall of the person passing down the bag, the patentee suspends the bag by cords, fixed at different parts thereof, so as to produce a zig-zag direction of the bag, similar to a winding staircase. Those who wish to inspect the machine itself, may do so, by applying to Mr. Redgrave, 22, Adelaide-road, Haverstock-hill.

GOLD MINING IN AMERICA AND CANADA.

As everything connected with the successful results of mining operations, particularly as regards the precious metals, is of the most lively interest, we proceed to lay before our readers some account of a gold mine in the state of Virginia, in North America, supposed to be the most extensively worked, and the best organised of any of the gold mines in the United States. This mine is situated in a fertile and populous country, with good roads, and rapid and easy conveyance, and when we consider the mining districts of South America and Russia, their almost inaccessible situation, difficulty and expense of carriage, &c., the superiority of the situation of those of North America is self-evident.

The Orange Grove or Vancluse Mine is situated in Orange County, State of Virginia, near the eastern line of Spotsylvania County, about two miles north of the Swift-run-gap turnpike, leading from Fredericksburg to Orange Court-house, one mile south of the Rapidan, or south branch of the Rappahannock River, and about 17 miles from Fredericksburg. This mine was discovered in 1832, and for a number of years worked as a deposit or surface mine for gold, before the veins or lodes of ore containing the precious metal were discovered. The surface working, or washing, for gold on the estate has been conducted from that time (with few, if any intervals) until the year 1846, always yielding a good profit, and employing a large number of men. The veins or lodes of ore, which are numerous, run N.W. and S.W., and dip to the N.E. The walls of the same are of various slates. The ores are slate, talcose, schist, and quartz, containing sulphurets of iron, brown oxide of iron, black and brown hydrates of iron, and the slates near the veins or lodes are highly metalliferous and often coloured with iron. At the depth of 70 ft. or 80 ft. the hydrates are often found incrusting the sulphurets, all of which contain gold, and some of which are very rich. The lodes, or veins, vary in size and width; from 4 ft. to 20 ft., and some bodies of ore are found as wide as 30 ft. or 40 ft.; most, if not all, are connected, one with the other, by small leaders, or threads. Parallel with these, there has been discovered ore containing native copper in minute crystals, and also the sulphurets and oxides of copper and iron, all rich in gold, but they have not been worked to any extent, as the native copper forms an amalgam with the gold and quicksilver, which requires the process of cupellation to separate the gold. All the ores here are worked by amalgamation; there is, however, not the least doubt, but that they can and will be worked to great profit, when the process of smelting is introduced, which is now about to be done, whereby the rich sulphurets and hydrates which are now laid aside, can be advantageously worked. This would add materially to the returns of gold, as, agreeably to experiments made on a very large scale, by order and at the expense of the Russian Government, it resulted, that a given quantity of ore, which, by the ordinary washing process, yielded 6-8ths of an oz., produced by the smelting process no less than 72 ozs. and 5-6ths of an oz., thus showing, that by this means there was obtained no less than 87 times more than by the old method. In 1844, the present establishment was commenced, the mine purchased, and a powerful and very superior English condensing engine brought on the ground for the purpose. It will be recollected, that the former proprietor commenced operations without the least capital, and had purchased the mine, erected all the machinery and buildings, and built one of the largest, and one of the most complete establishments for mining purposes in the United States, and all from the products of the mine. The mineral tract contains 200 acres, lying in a long and comparatively narrow strip on the course of the veins, so as to give to each vein a line of dips in length of 14 miles from N.E. to S.W. There is likewise attached to the same estate, besides the wood on the mineral land, 150 acres of wood and timber land for the engine's consumption, or fire-wood. The location is one of the healthiest in Virginia, and its proximity to Fredericksburg and the northern counties makes it one of the most desirable mining properties in this country. The machinery consists of a very perfect condensing Cornish mining-engine, 120-horse power, over which is a first-rate substantial engine-house, and stack 50 ft. high. On the north of the engine and boiler-house is a large frame mill-house, containing six large Chilian mills, consisting of cast-iron bed plate, 5 ft. 6 in., and weighing 2200 lbs. each. On each of the six bed-plates are two runners, or cast-iron wheels, or 12 in number, 5 ft. 6 in. in diameter, and 2 in. thick, running on the edge, the centres of which are filled with heavy oak timber, and each, with their shafts, weighs about 2000 lbs. These mills are situated in two rows, and are geared to, or receive their motion from, the steam engine. As all the ores are ground in water, each mill is supplied with warm and cold water at pleasure; 12 in. from the top of the bed-plate there is a wide open mouth which allows the turbid or thick water (caused by the grinding or reducing the ores) to escape into a trough, by which it is conducted to the tanks or reservoirs. There is likewise in this department the machine for washing the residuum, and obtaining the amalgam and quicksilver hereafter mentioned. On the south side of the steam-engine is the stamp-house and amalgamating room, containing six batteries of three stamps each, or 18 in number, also driven by the engine, and each of which, with the iron head of 125 lbs., weighs 350 to 380 lbs. The stamps of each battery of three are supplied with water, which is regulated by a stop-cock; at each blow of the stamp a portion of fine ore, freed gold and water pass out of the boxes through the grates, and thence through troughs to the amalgamating rooms. The bowls are supplied with runners, which move horizontally; in the centre of these runners is an eye or opening, like that in the runner of a corn mill. The ground, or fine-stamped ore, gold, and water pass into this eye or cone, and, by the rotary motion of the same, are brought into contact with the quicksilver, which is in the centre, and form an amalgam, the affinity of the one for the other being very great. To the east, and near the 18 amalgamating mills, are three dolly-tubs, or catchalls, about 5 ft. in diameter, into which the ore, &c., after passing through the amalgamators run, depositing any quicksilver or gold that may have passed off, should the machinery of the former not work as it ought. After this the whole mass passes to the strakes, or inclined planes, where the sulphurets, &c., are deposited, and the earthy matter washed away. On the south of the stamp or amalgamating house there were formerly two heavy Mexican drags, or *arrastres*, for the reduction of sand and sulphurets; but, not answering so good a purpose, they have been altered into three heavy Chilian mills, like the six described in the north wing, but rather heavier. Besides the buildings for the machinery, which are all of substantial frame, there are dwelling houses for agents, superintendent's, boarding houses, carpenter's shop, store-house, blacksmith and machine shop, grist mill, cabins for 100 to 150 workmen, stabling for 20 horses, and all necessary out-buildings, as bake-house, kitchen, &c. The buildings are all in good order and new. The ore is raised from the pits, or shafts, which vary from 30 ft. to 80 ft. deep, by hand windlasses and horse-wheels, in iron bound buckets, to which are attached well tried iron chains, imported for the purpose, instead of ropes. The ores, on arriving at the surface, are divided into but two classes—coarse and hard ore for the stamps, slate and fine or small ore for the Chilian mills; this is done by means of a large screen. The ore which passes through this screen is sent in carts, or by railroad, to the mill-house, and the coarse, or large pieces, to the stamps; the very large pieces are first broken with hammers, but this is seldom required. The water is raised from the different shafts or pits, as it accumulates in the large sliding, or runs from thence to the dam, or great reservoir, where all the water from the different shafts, as well as the pits, is concentrated, and passes through a tunnel to the large well-room, in which are located one 7 in. and one 4 in. lift or pumps, to raise the water into a large cistern, containing 7000 gallons, for the steam-engine, mills, stamps, and all other purposes required in the working and washing processes. 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CLASCADE MINE.—TWENTY SHARES in this valuable mine to be sold, for TWELVE SHILLINGS per SHARE. Apply at the Royal British and Foreign Mining Office, 143, Strand, London.—April 7, 1848.

IRON, HARDWARE AND METAL TRADES PENSION SOCIETY.—The FIFTH ANNIVERSARY FESTIVAL of this INSTITUTION will be held at the LONDON TAVERN, BISHOPSGATE-STREET, on WEDNESDAY, the 26th April, 1848—the Right Hon. the LORD MAYOR in the chair.

PRESIDENT.
WILLIAM THOMPSON, Esq., Alderman, M.P.
VICE-PRESIDENTS.
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Thomas Langton, Esq.
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WILLIAM CUBITT, Esq., M.P., Sheriff of London and Middlesex.
CHARLES HILL, Esq.
William Barrow, Esq.
Joseph Bennett, Esq.
John Brown, Esq.
H. Bull, Esq.
W. S. Burton, Esq.
John Carlier, Esq.
T. R. Childley, Esq.
John Chubb, Esq.
Thomas Constable, Esq.
John Dale, Esq.
R. Dale, Esq.
William Dickinson, Esq.
William Dray, Esq.
Samuel Ellis, Esq.
Henry English, Esq.
Jeremiah Evans, Esq.
A. H. Farwell, Esq.
John Faulkner, Esq.

FOREIGN CATTLE AND PROVISION COMPANY.
REGISTERED PROVISIONALLY.
(Pursuant to the Acts of Parliament, 7 and 8 Vic., c. 110, and 10 and 11 Vic., c. 78.)
Intended capital £150,000 (with power to increase or diminish the same), in 15,000 shares, of £10 each.—Deposit 1s. per share.
No call will exceed 1s. per share, of which one month's notice will be given.
OFFICES—No. 3, F.O.B.URY.

PROVISIONAL COMMITTEE.
Mr. SAMUEL WOOLSEY, merchant, Norwich.
Mr. JOHN KEABLE, Jun., Great Yarmouth.
WILLIAM HENRY CALEY, Esq., Cambridge-terrace, Regent's-park.
Mr. ADAM CLARK, salesman, Dumfries and Norwich.
Mr. MARK HEDGRAVE, 20, Moorgate-street.
Mr. EMANUEL H. VAN STRAETER, Iottendam.
Mr. JOHN PIERCE, provision merchant, Cotton's Wharf, Tooley-street.
Captain JAMES TOMLIN, 72, Cornhill.
Captain J. P. CHATTEN, 264, High-street, Wapping.
Mr. STEPHEN FLOMOW, salesman, Norwich.
Mr. DAVID GORDON M'QUHAE, salesman, Norwich.
Mr. B. J. CHAPMAN, 4, St. James's-road, Old Kent-road.
Mr. SAMUEL THURNELL, Adm-street, Cambridge-heath.
Mr. WILLIAM TREMAINE, 33, Prosser-street, Goodman's-fields.
Mr. AUGUSTUS CHOOK, Bungay, Suffolk.
Mr. JOHN LEWIS, 41, Beech-street, Barbican.
Mr. J. VAN RAALTE, Great Yarmouth.
Mr. G. E. PARISH, 15, Cranmer-place, Waterloo-bridge.
Mr. J. E. LAWS, Great Yarmouth.

SOLICITORS.
T. D. Keighley, Esq., 73, Basinghall-street; Messrs. Reynolds & Palmer, Gt. Yarmouth.
BANKERS.
Messrs. Barclay, Bevan, Tritton, & Co., Lombard-street; Messrs. Gurneys and Birkbeck, Norwich; Messrs. Gurneys, Turner, and Brightwell, Great Yarmouth; Messrs. Moses, Ezekiel, and Co., Rotterdam.

LONDON AND FOREIGN AGENTS.
London—A. Spielmann, Esq., Lombard-street.
Rotterdam—J. H. Van Straeter.
Amsterdam—E. S. Van Beusekom.
Hamburg—Jacob Thorner.
Havre-de-Grace—Henry Manstina.

SECRETARY—James Dove, Esq.
This company is projected for the purpose of organizing a system, upon which the importation of cattle and provisions from the continent of Europe, or elsewhere, may be carried on more extensively and economically than it can be by individual speculation. The business of the company will be primarily that of importing cattle, sheep, and provisions from Holland, Denmark, Germany, Spain, Portugal, Scotland, and any other country which presents a favourable market; and attention will also be directed to the purchase of cured and prepared provisions, and dairy, farm-yard, and orchard produce, when it can be imported with advantage.

The importation of foreign cattle for consumption into this country is still in its infancy; but the rapid progress which it has already made, gives ample assurance, not only of the great profit attending it, but of the existence at once of a demand and supply sufficient to afford active and lucrative employment for the resources of a public company.

The following returns are extracted from the official reports of the Board of Trade made up to the 5th of January, 1848:—

A Return of Live Animals Imported in the years 1845, 1846, and 1847.

	1845.	1846.	1847.
Oxen and bulls.....Nos.	9,743	17,191	27,811
Cows.....	6,503	25,349	35,138
Calves.....	587	2,403	12,889
Sheep.....	15,945	91,732	136,527
Lambs.....	2,892	3,349	3,349
Swine and hogs.....	1,590	3,856	1,242
Total of all kinds.....	34,380	143,523	216,456

Showing an increase of more than 400 per cent. in 1846 over 1845, and of more than 600 per cent. in 1847.

A Return of Provisions Imported in the years 1845, 1846, and 1847.

	1845.	1846.	1847.
Bacon.....Cwt.	53	2,960	87,067
Beef, salted.....	8,542	173,051	112,590
Beef, fresh.....	3,272	2,121	5,011
Hams.....	5,426	11,242	18,264
Meat, not otherwise described.....	435	1,118	3,114
Pork, salted.....	39,540	72,656	235,313
Pork, fresh.....	133	133	101
Total of all sorts.....	133,401	265,281	461,460

Showing an increase of about 100 per cent. in 1846 over 1845, and of near 400 per cent. in 1847.

The above returns exhibit a trade in which the transactions appear (from a moderate calculation), to have amounted during the last year to more than a million and a half sterling, and to have increased in value fivefold in the short space of two years. These results too have obtained by the feeble agency and operations of individual enterprise alone; and if these have been profitable, how much more so would be the organized operations of a public company in the same field?

The advantage which this company possesses will not consist solely in the greater extent of their resources, and the more perfect agency under their direction, but also in the economy with which their capital will be employed. By proper arrangements with respectable houses abroad, they will be able, with a comparatively limited capital, to carry on a very extensive scale of importations from all the productive sources of supply.

The committee have the gratification of announcing that they have secured most eligible water-side premises; and that parties of high character and long standing abroad are prepared to enter into the necessary arrangements with the company, and to co-operate with it in realizing its anticipations of success, in which they warmly concur.

In addition, the committee would advert to the great facilities which the progress of steam navigation and railway traffic has at length afforded for the vigorous and successful conduct of that branch of international trade which this company will carry on. A constant and expeditious intercourse is now kept up by steam navigation, between the ports of London, Yarmouth, Harwich, Lowestoft, Great Grimsby, and Hull, on this side, and the principal ports of the continent on the other; and from the latter, railways are diverging in every direction into the interior of the continent, through the rich grazing districts of Holland, Hanover, Prussia, Holstein, and other States of Germany, from which large supplies of cattle and provisions can thus, at all times, be procured.

As an Act of Parliament will not be required for the incorporation of the company, the expenses incurred in its formation will be not be considerable, and the interests of the shareholders will be secured by a Deed of Settlement, prepared by counsel, until which time all contracts as to shares will be entered into by and with the secretary only, as a trustee for the company.

The company will commence operations as soon as a competent number of shares are taken, and a sufficient amount paid up to render it expedient. The committee have power to increase or diminish the capital, and to reserve a portion of shares for allotment at a future period, if deemed advisable.

Applications for shares in the annexed form to be sent to the secretary, at the offices of the company, No. 3, Lombury, where prospectuses may be obtained. Also, at the offices of the solicitors to the company: Adam Spielmann, Esq., Lombard-street; the Bull Inn, Market-place, the Bell Inn, and the Cattle-market Inn, Norwich; Mr. Laws, the Quay, Mr. Costerton, Regent-street, and at the Bear and Angel Inns, Great Yarmouth; Mr. Cavell, Doat; Mr. Burrell, Hastings; Mr. Freeman, Market-place, Northampton; Messrs. R. Cruso and Son, Lynn; Thomas Tootal, Esq., Manchester; Messrs. Roddaile, Myers, and Bailey, Leeds; and at Messrs. John Wills and Co., Liverpool.

FORM OF APPLICATION FOR SHARES.
FOREIGN CATTLE AND PROVISION COMPANY.—(PROVISIONALLY REGISTERED.)
Intended capital, £150,000 (with power to increase or diminish the same), in 15,000 shares of £10 each.—Deposit, One Shilling per share.

Mr. JAMES DOVE, Esq., Secretary of the Foreign Cattle and Provision Company.
I request you will allot me _____ shares in the above company; which I agree to accept, as any loan number you may allot to me, and to pay, when required, the deposit of 1s. per share to the company's bankers, and to execute the Deed of Settlement, upon receipt of notice from you that the same is ready for execution.

Signed this _____ day of _____, 1848.
Name in full.....
Profession or business.....
Residence in full.....
Name of relative.....
His residence and occupation.....

ORANGE GROVE MINING COMPANY.—(VAUCLUSE GOLD MINE).—Organized August 26, 1847, under charter, by Act of Assembly of the State of Virginia.

Capital \$500,000, issued in 10,000 half shares.—Capital paid in, \$125,000.
PRESIDENT.—WILLIAM PETER, Esq., H. B. M. Consul.
CHAIRMAN OF THE BOARD OF DIRECTORS.—STEPHEN R. CRAWFORD, Esq.
DIRECTORS.
WILLIAM COFFIN, Esq.
JAMES CRAWFORD, Esq.
WILLIAM FORD, Esq.
W. K. SMITH, Esq.
F. A. BELL, Esq.
TREASURER.—F. A. BELL, Esq.
SECRETARY.—Francis Finch, Esq.
LONDON AGENTS—Messrs. Walker, Grant, and Co., King's-road, Gray's Inn.

CORNWALL NEW MINING COMPANY.
Capital £100,000, divided into 20,000 shares, of £5 each.
(With power to be increased.)
To be incorporated, in pursuance of the statute of 7 and 8 Vic., cap. 110—by which the responsibility of each shareholder is limited.

Deposit 20s. per share.
Not to be paid until the Company is completely Registered and Incorporated.

The CORNWALL NEW MINING COMPANY is ESTABLISHED TO WORK A SERIES of TIN and COPPER MINES, chiefly in the district of ST. IVES, which has hitherto afforded a larger profit on its return of ore than any other part of the county.

In pursuance of this plan, five of this description have been already selected—viz.: Georgia Tin Mines, Trewithon Tin and Copper Mine, Bray Tin and Copper Mine, Trevanno Tin and Copper Mine, and Wheel Square Tin and Copper Mine, with whose owners the committee have been enabled to make such advantageous arrangements, as to enable them to work one or more with even a small portion of the proposed capital. These mines are not only known to contain mineral areas of immense value, but the workings are already so far advanced, that the lodes ascertained and reached must produce early and large returns; and, in addition to the above, there are others which the committee have secured an sufficient public support being obtained.

With a view of inducing the public generally to avail themselves of such a beneficial employment of their capital, the committee have made the shares £5, and of which only £2 10s. is to be paid within 18 months—limiting further calls to the control of the subscribers themselves, and to be made only when a dividend shall have been declared.

Applications for shares to be made, in the usual form, at the offices of the company, 17, Essex-street, Strand; and to the following brokers and agents, of whom detailed prospectuses may be obtained:—Messrs. G. and T. Irvine, Liverpool; Messrs. Cardwell and Sons, Manchester; Messrs. J. Scott and Son, Birmingham; Messrs. Rhodes and Hayes, Leeds; Messrs. Brady and Co., Hull; Mr. Joseph Clarke, Jun., Southampton; Mr. Chas. Clay, Halifax; Messrs. William and Charles Skarston, Plymouth; Messrs. W. Moore and Co., Huddersfield; Mr. Thomas Dewhurst, Bradford; Mr. Henry Vatcher, Exeter; Mr. Ralph Dodsword, York; Mr. W. F. Collier, Brixham; F. Crowe, Great Yarmouth; Mr. Charles Vincent, Dartmouth; Messrs. Edward Morgan and Co., Norwich; Messrs. Robinson Cruso and Son, King's Lynn.—Prospectuses can also be had at the office of the Mining Journal, 26, Fleet-street, London. **GEORGE LOCKWOOD, Secretary.**
Office, 17, Essex-street, Strand.

BANGOR AND COYTOMR SLATE COMPANY, BANGOR, NORTH WALES.
Provisionally Registered under the Statute.

Capital £50,000, in 5000 shares, of £10 each.—Deposit £1 per share, on complete registration.

DIRECTORS.
GEORGE BURGE, Esq.
WILLIAM S. FOSTER, Esq.
CONSULTING ENGINEER.—John Taylor, Jun., Esq., F.G.S.
BANKERS.—London Joint-Stock Bank.
SOLICITORS.—Messrs. Fyson, Carling, and Hope.
AUDITOR.—Mr. J. E. Elsey.
SECRETARY.—Mr. William Nicholson.

This company is formed for the purpose of working a portion, consisting of 52 acres, of the Great Bangor Slate Bed, situated about five miles from the port of Bangor, on the London and Holyhead road, and held under a lease, of which 21 years are unexpired. The Coytomr estate adjoins the celebrated quarry belonging to Colonel the Hon. D. Pennant, which has been worked upwards of 70 years, and employs at the present time 2600 men, producing an estimated profit of upwards of £29,000 per annum.

On the same vein or bed, to the south-west, is the quarry of Thomas Ashteton Smith, Esq., employing 1500 men, and yielding an estimated profit of £30,000 per annum. These quarries were commenced by an outlay of a few thousand pounds.

The vein or bed of the Coytomr estate is the same, both in width and quality, as that of Colonel Pennant's and Mr. Ashteton Smith's: this is shown by a small adjoining quarry, the Pantdring, worked to the depth of 150 ft., within 20 yards of the boundary of this company's quarry, and by shafts sunk in various parts of the sett.

The Bangor and Coytomr Quarries has not yet been worked, except upon trial, but a tunnel 9 ft. by 7 ft. has been driven from the turnpike road, 350 yards through the slate bed, to drain the quarry, and to take off the slate from the lower level, for which a tramway is already laid down. Six years have been occupied in driving the tunnel, which renders the erection and cost of machinery unnecessary. The tunnel was constructed by the late Mr. Giles, C.E.

The apron, or top of the quarry, consisting of loam and broken slate rock, does not exceed 10 yards in thickness, which may be cleared off within three months, when an unlimited quantity of the best blue and purple slate may be quarried.

Quarrying is chiefly done by piece-work. The wages paid at the adjoining quarries are under 30s. per thousand: the cartage to the port is 6s. per thousand, or 3s. per ton; the present price of slate, taking the average of Duchesne, Countess, and Ladies, is about 1s. per thousand, leaving a gross profit, after the quarry has been well opened, of 50 per cent. on the labour expended, and a net profit of upwards of 30 per cent. The profit on the principal quarries along this great bed exceeds that amount.

Such is the repute, and so great is the demand for Bangor slate, that, on an average, throughout the year, from 50 to 60 vessels, of from 80 to 400 tons, lie at the port of Bangor waiting their turn for cargoes from Colonel Pennant's quarry alone.

During the late panic, when the price of almost every article of commerce was reduced 20 per cent., the late price of the principal slate quarries suffered no diminution. A piece of freehold land, adjoining the Great Bangor, has been purchased, on which a wharf, for shipping the slate, may be constructed at a moderate expense.

The capital of the company will be £50,000, but not more than £25 per share, or £20,000, will be called up within the first 12 months, which sum is deemed sufficient to cover the purchase money and all other outlays, and to put the quarries into full operation.

Applications for prospectuses, plans, and shares, to be made to Messrs. Foster, brothers, 25, Tokenhouse-yard; Mr. James Lane, 75, Old Broad-street, broker; or to Mr. Nicholson, at the office of the company, 87, Old Broad-street, London.

PENNANT LEAD AND COPPER MINING COMPANY.
—At a Special Meeting of the shareholders in this company, held at 68, Cheap-side, City, on Thursday, the 18th of April, 1848.

R. O. ALAND, Esq. (in the absence of J. C. Ridgway, Esq.), in the chair.
W. Mansell, Esq. (purser of the company), having read the notice convening the meeting, and the report of the directors, it was—

Proposed by the Chairman, seconded by H. R. Bewicke, Esq.,
Resolved.—That the report of the directors be received and entered in the cost-book.

Proposed by the Chairman, seconded by B. F. Scott, Esq.,
Resolved.—That a call of 4s. per part, or share, be now made, to be paid on or before Monday, the 1st of May.

Proposed by G. R. Metzler, Esq., seconded by Charles Smith, Esq.,
Resolved.—That the utmost confidence is felt by the shareholders in the discretion and judgment of the directors: that they be, and are hereby, authorised to complete terms for an amalgamation with any other undertaking which is now productive and sending ore to market; and to make a further call, if necessary, for carrying the same into effect, by giving one month's clear notice.

Proposed by W. W. Mansell, Esq., seconded by B. Davies, Esq.,
Resolved.—That this meeting has much pleasure in confirming the election of Captain Thomas Rose as a director in the company, in the room of John Puseford Osborne, Esq., resigned.

Proposed by W. Varley, Esq., seconded by G. R. Metzler, Esq.,
Resolved.—That the best thanks of the shareholders are due, and are hereby given, to the chairman and directors, for the able manner in which the affairs of the company are managed.

Proposed by the Chairman, seconded by R. F. Stedman, Esq.,
Resolved.—That Mr. Charles Smith be appointed the auditor of the company.

Proposed by the Chairman, seconded by C. R. Bewicke, Esq.,
Resolved.—That the best thanks of the shareholders be given to the purser, for the attentive and efficient manner in which he has performed the duties of his office.

Proposed by B. F. Scott, Esq., seconded by B. Davies, Esq.,
Resolved.—That the thanks of this meeting be given to the solicitors, for the careful manner in which the legal affairs of the company have been conducted.

Proposed by the Chairman, seconded by B. F. Scott, Esq.,
Resolved.—That the thanks of this meeting be given to Mr. Hugh Jones, for the manner in which he has carried into effect the different works at the mines.

Proposed by Alfred Smith, Esq., seconded by Thomas Marston, Esq.,
Resolved.—That Mr. Charles Smith be requested to assist the directors in carrying out the contemplated amalgamation.

Proposed by B. W. Mansell, Esq., seconded by B. Davies, Esq.,
Resolved.—That the chairman do leave the chair, and that C. R. Bewicke be requested to take it. (Signed) R. O. ALAND, Chairman.

C. R. Bewicke, Esq., having taken the chair,
Proposed by W. Johnson, Esq., seconded by R. F. Stedman, Esq.,
That the best thanks of this meeting are due, and are hereby given, to R. O. Aland, Esq., for the trouble he has taken this day in presiding, in the unavoidable absence of J. C. Ridgway, Esq., and for the efficient manner in which he has fulfilled the duties thus unexpectedly devolving on him. (Signed) C. R. BEWICKE, Chairman.

W. W. MANSELL, Purser.
Temporary Offices, 17, Dorchester-place, Blandford-square.

IMPROVED LIFTING JACKS.
MANUFACTURED BY
W. AND J. GALLOWAY,
PATENT RIVET WORKS,
MANCHESTER.

“The attention of parties who employ
Lifting Jacks,
is respectfully requested to the superiority of these annexed, over those hitherto in use.”



ADCOCK'S PATENT SPRAY PUMP.—This important INVENTION having been PERFECTED, and brought into SUCCESSFUL PRACTICAL OPERATION, the PATENTEE is ready to RECEIVE, and to execute, ORDERS.—Apply to Henry Adcock, C.E., at his office, No. 2, Moorgate-street, London, where pamphlets, descriptive of the invention, may be had: or at the office of the Mining Journal, 26, Fleet-street; and through any respectable bookseller—price 6d.

IMPORTANT TO RAILWAY AND STEAM NAVIGATION COMPANIES, MANUFACTURERS, AND ENGINEERS.
W. BROTHERTON AND CO.'S
PATENT LUBRICATING FLUID (or ANTIMONY) FOR ALL DESCRIPTIONS OF MACHINERY.

W. B. & CO. have the pleasure to state, that the above article is extensively used in Her Majesty's Steam Navy, and by several of the principal Steam Navigation and Railway Companies, and is pronounced by them, and by the first practical engineers of the day, to be far better adapted for the purposes of lubrication than any other article hitherto used for such purposes. The Patent Lubricating Fluid is equally applicable for the most intricate and fine pieces of machinery, as for the heaviest bearings of the steam-engine. It is cheaper, much more economical, and cleaner than oils at present in use; it is free from smell, and calculated to effect a vast saving in the expenditure of working steam powers. Further particulars can be had, and testimonials seen, by application to the manufacturers, W. BROTHERTON & CO., Hungerford Wharf, Strand, London. N.B.—The above article will burn in lamps, and give a light equal to the best sperm oil.

TO ENGINEERS AND BOILER-MAKERS.
LAP-WELDED IRON TUBES, FOR MARINE AND LOCOMOTIVE STEAM-BOILERS.
TUBES FOR STEAM, GAS, AND OTHER PURPOSES,
ALL SORTS OF GAS FITTINGS.

THE BIRMINGHAM PATENT IRON TUBE COMPANY.
42, CAMBRIDGE-STREET, BIRMINGHAM, & SMETWICK, STAFFORDSHIRE.
MANUFACTURE BOILER AND GAS TUBES, under an exclusive License from Mr. R. Prosser, the patentee. These tubes are very extensively used in the boilers of marine and locomotive steam-engines in England and on the Continent—are stronger, lighter, cheaper, and more durable than brass or copper tubes, and are warranted not to open in the weld.

WORKS—SMETWICK, STAFFORDSHIRE.
LONDON WAREHOUSE—No. 68, UPPER THAMES-STREET.

PATENT ALKALI COMPANY'S IRON PAINT.—This PAINT, now first offered to the public, is the PRODUCT of a PATENT PROCESS, and possesses VALUABLE and PECULIAR QUALITIES, not otherwise attainable. Its colour is a purple-brown—it is perfectly innocuous—is far more durable than lead paint, and two coats are fully equal to three of any other paint. A single coat will be sufficient to demonstrate this. It dries rapidly, and its durability is very great.

From its chemical composition, it is especially, and above all other paints, adapted for covering iron; also wood, and stucco, or brick walls. The peculiar oxidation of the base of this paint makes it impossible that further change should take place in its composition. It is identical with iron secured by galvanic action, so injurious to the durability of lead points on iron work. It has been exposed on shipping to the action of sea-water, and the sulphuretted hydrogen, so prevalent in sea-ports and tidal harbours, for three years, without change.

Its cheapness and strength render it admirably adapted for iron railings, farm buildings, and shipping. It will also cover creosoted timber. Price, by the ton, £20, delivered in London. All orders to be addressed to the offices of the company, 20, Fenchurch-street, London; where testimonials may be seen as to the value of the paint.

EVANS, BROTHERS, Agents.

SNYDER'S PATENT LEATHER COMPANY.
(Provisionally Registered, pursuant to the Act 7 and 8 Vic., cap. 110.)
Capital £50,000, in 12,000 shares, of £5 each.—Deposit 10s. per share.—No call to exceed 10s. per share, nor at intervals of less than three months.

CHAIRMAN.—JOHN GARDNER, Esq., M.D., 51, Mortimer-street, Cavendish-square.
PROVISIONAL DIRECTORS.
G. W. BLANCH, Esq., 3, Albion-place, Blackfriars-road.
H. ENGLISH, Esq., 25, Fleet-street.
W. PEARSE, Esq., High-street, Exeter.

THOMAS FORTELL, Esq., City-terrace, City-road.
W. SHEARMAN, Esq., 12, Green-street, Ardwick, Manchester.
JOSEPH SMITH, Esq., Parkfield, Rusholme, Manchester.
W. STAGG, Esq., Green-park, Manchester.
J. TRUSCOTT, Esq., Hemmingsford Villa West, Barnsbury-park, Islington.
D. L. WILLIAMS, Esq., 6, Edwards-square, Kensington.
W. M. WILLIAMS, Esq., 17, Wilford-street, Brunswick-square.

BANKERS.—The Commercial Bank of London, Lombury.
SOLICITOR.—E. Moss, Esq.—**SECRETARY.**—Mr. E. Fenton.
OFFICES.—TEMPLE CHAMBERS, FLEET-STREET.

This company has been formed to carry into effect an improvement in the art of tanning, by which leather is rendered not only superior in quality, but is produced at a lower price, and more uniform in texture, than by any process hitherto known.

A patent having been granted to Mr. Snyder for his improvements in tanning, the rights of the patent have been secured, on advantageous terms, as also his services in carrying out the operations of the company.

From estimates which have been carefully gone into, and which can be inspected on application at the offices of the company, a large return on the capital employed will be obtained, even to the extent of 100 per cent. per annum.

This estimate may appear to show profits so far beyond the ordinary result of trade as to call for explanation. Snyder's patent effects a saving of—1. Half the time in tanning; 2. 10 or 15 per cent. of skin or hide—i.e., the leather produced weighs so much more; 3. A saving of 10 per cent. of tan; and 4. The production of a superior article. In this respect Snyder's Leather will compete with the best French Leather.

Prospectuses, with every information, will be afforded on application to E. Moss, Esq., solicitor, 4, Queen-street, Chancery; or to the secretary, at the offices of the company, to whom applications for shares are to be addressed.

The directors beg to claim the attention of the public to their arrangements, which they trust, will be found to secure the interest of subscribers, without incurring any of those evils not unfrequently attendant upon such enterprises.

LONDON AND PROVINCIAL DETECTIVE ASSOCIATION, FOR THE PROTECTION OF TRADE.
No. 39, SOUTHAMPTON-BUILDINGS, HOLBORN, LONDON.

OFFICE HOURS: TEN TO FOUR.
The object of this institution is to furnish every information (which may be obtained by subscribers only) respecting all parties, in any capacity whatever, avoiding their creditors, under any circumstances; also, in providing every species of information calculated to protect Bankers, Merchants, Tradesmen, Companies, Institutions, Assurance Offices, Loan Societies, Auctioneers, Landlords, Tenants, &c., in such a manner hitherto unattempted by any kindred society.

Subscribers may be preserved from losses through fraud of all kinds, by previous application at this office. They are also requested to make every communication in their power that may tend to protect the members, which will be considered strictly private, and, at the same time, deemed a favour.

Persons wishing to become members of this association, must apply, by letter only, addressed (pre-paid) to the secretary, who will forward the rules.

Subscribers only are eligible to apply for any information—the terms of which are £1 ls. per annum—10s. 6d. in advance. H. E. NEWMAN, Secretary.

PROFESSIONAL LIFE ASSURANCE COMPANY.
Connecting the Clerical, Legal, Military, Naval, and Medical professions, and holding out advantages to the public not hitherto offered by any similar institution.
Incorporated.—Capital £250,000.

Established upon the mixed, mutual, and proprietary principle.
Rates essentially moderate.—Every description of policy granted. Immediate, survivorship, and deferred annuities; and endowments to widows, children, and others.—Every policy (except only in cases of personation), indisputable.—The assured permitted to go to and reside in Canada, Nova Scotia, New Brunswick, Australia, Madeira, Cape of Good Hope, and Prince Edward's Island, without additional premium.—Medical men remunerated for their reports.—Loans granted on real or personal security.—One-tenth of the entire profits appropriated for the relief of the assured while living, and of his widow and orphans.—Annuities granted in the event of blindness, insanity, paralysis, accidents, and any other bodily or mental affliction, disabling the parties.—Persons of every class and degree admitted to all the advantages of the corporation.—Rates for assuring £100 at the age of 25, 35, 45, and 55, respectively—namely, £1 14s. 6d., £2 5s. 6d., £3 4s. 3d., and £4 18s. 6d.

Prospectuses, with full details, may be had at the office.—Applications requested from parties desirous of becoming agents. EDWARD BAYLIS, Actuary and Secretary.
Offices, 76, Cheapside, London.

NATIONAL LOAN FUND LIFE ASSURANCE SOCIETY.
26, CORNHILL, LONDON.
Capital £500,000.—Empowered by Act of Parliament.

This institution embraces important and substantial advantages with respect to Life Assurances and Deferred Annuities. The assured has, on all occasions, the power to borrow, without expense or forfeiture of the policy, two